Annual Report

Planning for Healthy Babies Program® (P4HB®)

1115 Demonstration in Georgia

YEAR 2

Submitted to the Centers for Medicare and Medicaid Services

By:

The Georgia Department of Community Health (DCH)

and

Emory University, Rollins School of Public Health (RSPH)

Department of Health Policy and Management (HPM)

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Revised due to corrected data on month of enrollment in a CMO among P4HB enrollees and updated eligibility data.

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Executive Summary

The Planning for Healthy Babies Program® (P4HB®), Georgia's section 1115(a) Medicaid Demonstration, expands the provision of family planning services to uninsured women, ages 18 through 44, who have a family income at or below 200 percent of the federal poverty level (FPL), and who are not otherwise eligible for Medicaid or the Children's Health Insurance Program (CHIP). The Demonstration also provides Interpregnancy Care (IPC) services to women who meet the same eligibility requirements above and who deliver a very low birth weight (VLBW) infant (less than 1,500 grams) on or after January 1, 2011. In addition, women ages 18 through 44 with a family income at or below 200 percent of the FPL, who have a VLBW delivery on or after January 1, 2011, and who qualify under Georgia's Low Income Medicaid (LIM) Class of Assistance or the Aged, Blind and Disabled (ABD) Classes of Assistance are eligible for nurse case management/Resource Mothers Outreach only services under the Demonstration. Georgia expects to achieve the following with this Demonstration:

- Reduce Georgia's low birth weight (LBW) and VLBW rates ;
- Reduce the number of unintended pregnancies in the state;
- Reduce Medicaid costs by reducing the number of unintended pregnancies by women who otherwise would be eligible for Medicaid pregnancy-related services;
- Provide access to IPC health services for eligible women who have previously delivered a VLBW infant; and,
- Increase child spacing intervals through effective contraceptive use.

A unique aspect of Georgia's Demonstration is that services are delivered through the Georgia Families Care Management Organizations (CMOs) and their networks of providers. Three CMOs - Amerigroup, WellCare of Georgia, Inc., and Peach State Health Plan - participate in the Georgia Families program and receive a capitated per member per month (PMPM) payment for each Demonstration participant. These capitation rates were approved by CMS and serve as the basis for calculating the expenses in the quarterly budget neutrality worksheet. The CMOs' provider networks provide clinical, laboratory, pharmacy and other Demonstration services to the P4HB participants and each of the three CMOs has nurse case managers and Resource Mothers who provide the case management services for the IPC participants. Title X clinics, largely public health departments in Georgia, are also included in the CMOs' networks.

The implementation of the P4HB program followed a multi-pronged communication plan, with engagement of the CMOs, professional associations, and the Georgia Department of Public Health (DPH) as well as direct engagement of consumers via printed and other media. DCH projected (based on 2008 survey data) that 276,548 women would be eligible for services under the Demonstration and that by the end of Year 1, 110,620 of those women would be enrolled and 33,186 would be using services. Despite multiple engagement efforts by DCH and providers in the community, there has been a lower than expected take-up of the program and even lower take-up of the program's benefits although participation rates increased in this second year. Using an estimate from the American Community Survey of uninsured women < 200% FPL in Georgia in 2011, approximately 12% of this estimated eligible population was enrolled in the FP only component at the end of CY2012. If the number of eligible women is adjusted for the percentage of women 'in need' of family planning services, the percentage enrolled in the family planning only component increases to 22.5%. This percentage includes the large number of women auto-

enrolled into the family planning only component of the P4HB program; some of the data in this report indicate these auto-enrolled women had less interest in the program and tended to use services at a lower rate than those initiating their own enrollment.

The PMPM payments to the CMOs totaled $14,776,646.80 for the second program year resulting in a total of $16,123,033.37 across the two years since implementation of the P4HB program. The PY2 total included $14,528,929.15 for FP only services, $211,200 for IPC services, and $36,517.65 for Resource Mother Only services. The PMPM for each of these program components included an administrative load amount of 13 %. These PY2 expenditures reflect a growth in enrollment during this period and represent a ten-fold increase in total spending during PY2 when compared with the expenditures for the first year of the program ($1,346,386). As reported in the third quarter 2013 P4HB Quarterly Report to CMS, the member months for the FP only enrollees continued to increase through the second year while the number of participants enrolled, member months, and expenditures for the IPC component of the Demonstration began to decline. Some of this decline may have been the result of a finding identified in this PY 2 report that as many as 7% of the IPC enrolled women experienced a new pregnancy, one experienced a repeat live birth, and one experienced a still birth in 2012. Once the pregnancy determination was made, these women would have been transferred to a new eligibility category within the Georgia Medicaid program.

In preparation for this report, the evaluation team examined early effects of the P4HB program on: 1) use of family planning services among Medicaid enrolled women and among women in the income range targeted by P4HB; 2) trends in Medicaid paid births and birth weight distributions; 3) pregnancies and births among P4HB enrollees and birth weight outcomes; 4) comparisons of birth outcomes between P4HB participants and non-participants; 5) time to next pregnancy for

Right from the Start Medicaid (RSM) enrollees with an index birth between 2009 and 2012; and 6) evidence of increased management of chronic conditions among IPC enrollees. As noted on the title page, this report uses corrected enrollment data for P4HB enrollees and update eligibility data. Since P4HB enrollees can only receive P4HB services once they are enrolled into a CMO this is the enrollment date that must be used for assessing subsequent outcomes such as pregnancies and/or births. Our outside evaluator did not have the CMO enrollment date in the data they originally used for the Annual Reports. This has now been corrected and the counts of P4HB enrollees used for assessing outcomes reflect this. This report presents data that support the following key findings:

Use of Family Planning:

- Use of any family planning services at Title X clinics from the first quarter of 2009 to the first quarter 2013 increased among uninsured women in the income range targeted by P4HB (>25% but < 200% FPL);
- Use of contraceptives at Title X clinics shifted toward long-acting, reversible contraceptives (LARCs) based on descriptive and multivariate analysis;
- Use of family planning services among all Medicaid enrolled women ages 18-44 increased between 2009 and 2012;
- The growth in family planning services paid for by Medicaid or Title X did not increase enough to result in a growing percentage of all women < 200% FPL with a family planning or birth control visit over the 2009-2012 time period; but
- Users in both the Medicaid and Title X sectors shifted toward greater use of LARCs by 2012.

Trends in Births/Costs:

- Medicaid paid births were declining prior to implementation of the P4HB program and they have continued to decline through CY2011 but rose in CY2012 following overall patterns at the state level;
- Average paid amounts for infants at delivery increased only slightly from $3,274 to $3,889 over the 2009-2012 years;
- The percentage of very low birth weight infants remained close to 2.0% each year between 2009 -2012 based on Medicaid claims; and between 2009-2011 based on linked claims and vital records.

Pregnancy/Birth Experiences of P4HB Enrollees:

- An estimated 6.6% of FP only demonstration participants experienced a pregnancy after 3 months of continuous enrollment in P4HB and 1.5% had a delivery paid by Medicaid after enrollment;
- Total births to P4HB enrollees was 562 in 2012, still far less than expected given the fertility rates cited in the DCH Planning for Healthy Babies Concept Paper used in the application process[1];
- Birth outcomes of infants born to the FP only demonstration participants included a somewhat higher percentage of VLBW infants but a higher percentage LBW infants, than those infants born to RSM women in 2012 who were not enrolled in P4HB;
- Two IPC enrollees experienced a delivery after enrolling in the P4HB program. One had a live born delivery and one had a still born delivery paid by Medicaid in CY2012;

[1]http://dch.georgia.gov/sites/dch.georgia.gov/files/imported/vgn/images/portal/cit_1210/33/52/156793595PlanningforHealthyBabiesProgram121709Final.pdf

- Repeat pregnancies among women with a VLBW birth on Medicaid in CY2012 equaled 13.6% within 12 months for those not participating in IPC but were lower at 7.3%, for those participating in IPC;
- There were no repeat VLBW births among the IPC enrollees but there was one repeat VLBW birth among women in a RSM comparison sample.

Changes in Other Outcomes:

- The percentage of all RSM enrollees with a repeat pregnancy within 6 months of the index birth ranged from 3.2% to 3.7% during the 2009-2011 time periods and was lower at 3.4% in 2012;
- Infant first year of life costs after their delivery hospitalization averaged $2,355 in 2012 versus $1,851 in 2011; and
- Small percentages of IPC women were using services in 2011 but this increased in 2012 with most of them using services for acute conditions. The use of services by IPC participants for chronic conditions increased and the most common service was for the management of hypertension.

The numbers we present in this second annual report are based on claims and encounter data from 2009-2012 with linkages to the Georgia vital records for CY2009-CY2011. As the updated 2011 and new 2012 extracts were delivered to the evaluation team, it was realized that DRG coding, as reported by the CMOs, was markedly less complete than in prior years. As these new data came in, Emory conducted comparisons of counts of infants/deliveries and birth weight distributions using ICD-9 versus DRG codes and, using the linked 2009-2011 claims and vital records, concluded that the agreement between claims and vital records was similar for ICD-9 and DRG

coding. However, when using either coding system in comparison to the vital records, the claims data consistently demonstrated that: 1) a smaller percentage of infants were categorized as LBW; and 2) within those categorized as LBW, a larger percentage were categorized as VLBW than reported in the vital records for the same set of infants. Emory assigned the lowest birth weight observed in claims since, from a scientific viewpoint, this will provide a more conservative approach and if an effect is seen using this method we can be more confident it is a real/true effect. Ultimately, Emory will use the vital records data as the 'gold standard' for measuring birth weight once they are available and linked.

The evaluation team also noted that the claims led to an apparent undercount of infants in CY2011 and an undercount of deliveries in CY2012. The latter is most important for the measures reported here since deliveries to women enrolled in P4HB in the first full year after the implementation year will be *understated.* This should be kept in mind as the results presented here are reviewed. We recognize the lack of standardization in the definition of 'Medicaid-financed births' across states and hope that our effort in Georgia will contribute toward a common set of definitions and standards for computing these measures using Medicaid claims data, vital records, and once completed, linked claims-vital records.

Based on the updated data with the corrected CMO enrollment dates, Emory found that significant number of women came into the program most likely already pregnant. Based on this and other outcomes presented in this report, Emory University makes the following recommendations to DCH:

- Based on some positive signs in Year 2, we encourage DCH to seek an extension of the P4HB program beyond its scheduled end. The patterns observed near the end of the second

year indicate that P4HB may be reaching maturity in terms of achieving sustainable levels of enrollment, use of effective family planning methods, and management of women with very low birth weight infants. It is important for the state to strengthen these trends.

- Continue to work with Title X as an active partner in the enrollment of eligible women into the P4HB program and in the provision of family planning services to uninsured and under insured women who, if pregnant, are eligible for Medicaid coverage. A continued monitoring of the Title X quarterly data will inform DCH about the trends seen in the most recent quarters that indicate increased use of birth control methods and in turn, more use of LARCs. An added benefit of such a partnership is that these efforts can help Title X clinics 'leverage' Medicaid funds to increase revenues and allow for the use of Title X funding to further expand outreach, access and the provision of more effective methods of birth control to non-Medicaid eligible individuals.
- Increase efforts to retain the auto-enrolled women. Many of them will be coming up for recertification throughout the coming year. These women have accounted for a large portion of the total number of women enrolled in the family planning only component.
- Continue working with the IPC enrollees to ensure their awareness and utilization of the range of services available to them and, in particular, the management of chronic conditions in addition to the family planning services intended to help them prevent a repeat pregnancy or birth within a short time period.
- Explore opportunities to decrease the time between the eligibility determination and actual CMO enrollment for P4HB. While most women who eventually come into a CMO for P4HB services do so within two months from the date of the eligibility determination, this is a time period when women do not have access to P4HB services so unintended pregnancies may occur. There were 1,043 pregnancies observed among women enrolled

less than the three months required for inclusion in the full analysis. These can perhaps be seen as failures of women to understand the program and/or failure of the delivery system to get the women in for family planning counseling and services in a timely fashion.

- Consider a renewed marketing campaign for P4HB. The large number of women who appear to come into the program already pregnant is perhaps indicative of a misunderstanding of the preventive nature of the program. There were 1,035 pregnancies and 215 births among women who eventually enrolled in a CMO for three continuous months who apparently came into P4HB already pregnant and as noted above, an additional 1,043 pregnancies among those enrolled in a CMO for less than two months. This campaign should target: media outlets (TV, radio) as well as social media (texts, Face Book, Twitter) and; eligible FP only enrollees as well as eligible IPC enrollees. In addition, a provider component of this renewed marketing campaign should be included that targets a broad range of provider types (OBGYN, family physicians, nurse practitioners, Title X women's health coordinators, neonatal ICU providers and social workers). Previously collected qualitative information indicated that providers were confused about the status of P4HB, with many believing the program was ending in December 2013. This renewed marketing campaign would clarify that P4HB is continuing and should include clear information about eligibility, enrollment, and program benefits.

I. OVERVIEW OF THE PLANNING FOR HEALTHY BABIES PROGRAM (P4HB)

In response to the persistent high rate of low birth weight (LBW) and very low birth weight (VLBW) infants born to women in Georgia, the DCH designed a Section 1115(a) Demonstration and was granted authority by CMS to expand access to family planning services under the P4HB program. This program became available in January 2011 and eligible women must be: U.S. citizens and residents of Georgia who are otherwise uninsured and not eligible for Medicaid; 18 through 44 years of age; not pregnant but able to become pregnant; and with incomes at or below 200% of the Federal Poverty Level (FPL).

The P4HB program also provides Interpregnancy Care (IPC) services to women who meet the above eligibility criteria and who deliver a very low birth weight (VLBW) infant on or after January 1, 2011. The program also offers nurse case management and Resource Mother outreach services to women receiving IPC services and to women enrolled in the Georgia LIM or ABD (Aged, Blind and Disabled) Medicaid programs who deliver a very low birth weight infant on or after January 1, 2011. DCH identified the following as key goals for the P4HB Demonstration:

- **Primary**: Reduce Georgia's LBW and VLBW rates;
- **Secondary:** Reduce the number of unintended pregnancies in Georgia;
- **Tertiary**: Reduce Georgia's Medicaid costs by reducing the number of unintended pregnancies by women who otherwise would be eligible for Medicaid pregnancy-related services.

When pregnancies occur among the near-poor group of women at or below 200% FPL they qualify under Georgia's pregnancy ("Right from the Start") Medicaid eligibility criteria. Since women in this income range are made newly eligible for family planning services under P4HB, it is possible that the costs of deliveries paid for by the Georgia Medicaid program under the RSM eligibility category will begin to decline. A key objective of the Demonstration, as noted, is to reduce the proportion of unintended pregnancies/births and increase interpregnancy intervals among this 'targeted' group of near-poor women. Given the increased risk of repeating an adverse pregnancy outcome such as a VLBW delivery, the provision of IPC services for women at or below 200% of the FPL who deliver a VLBW infant is important to the overall success of P4HB in lowering the state's rate of VLBW births. The combined FP and IPC components of P4HB may also provide positive influences on birth weight by expanding the use of effective birth control methods among women in this income range, thereby decreasing unintended pregnancies and lengthening interpregnancy intervals. In particular, the FP only component may play a major role in influencing the birth weight distribution since the majority of very low birth weight births are first births, and this component of the Demonstration provides increased access to family planning for nulliparous women who would not otherwise be Medicaid eligible.

Family planning services available through the P4HB program include all family planning services covered by the Georgia Medicaid program as noted below:

- Comprehensive annual exam;
- Pap smear including follow-up testing with colposcopy as indicated, clinical breast examination;
- Follow-up contraceptive visits (4 per year);

- Pregnancy testing;
- Provision of FDA-approved contraceptive methods and supplies, evaluation and management of contraceptive-related problems;
- Sterilization;
- Treatment of major complications of delivered services;
- Diagnostic treatment and follow-up of STIs;
- Drugs, supplies, devices related to women's health services (genital tract infections, UTI's, etc);
- Multivitamin with folic acid or folic acid;
- HepB and Td vaccinations for 19 and 20 year-olds;
- Education and counseling (with referral as needed) related to reproductive health, preventive and preconception care, pregnancy timing and spacing, risk reduction for sexually transmitted infections, tobacco and substance abuse, domestic violence, and benefits and risks of contraceptive methods; and
- Counseling and referrals to social services and primary health care providers.

While the expansion of eligibility for these family planning services under P4HB should increase low-income women's access to a full spectrum of family planning services by permitting women within a higher income range to have coverage and by allowing access through private health care providers as well as county health departments and community health centers, this expanded access depends in large part on enrollment of eligible women and in turn, encouraging their use of available services. These services are available to eligible women for twenty-four (24) months as long as the woman remains eligible for P4HB.

The IPC services under the P4HB program are also available (for twenty-four (24) months) to eligible women who deliver a live born, VLBW (< 1,500 grams or 3 pounds, 5 ounces) infant. The goals of this program component are to delay conception of the women's next pregnancy for 18 to 23 months from delivery of the index VLBW infant and to improve women's underlying health status by addressing their health and preconception needs and managing their chronic and other health conditions. Women qualifying for the IPC component of the Demonstration receive the following services in addition to family planning services:

- Primary care visits (5 outpatients visits annually);
- Chronic disease management;
- Prescription medications for treatment of chronic diseases;
- Substance abuse treatment;
- Limited dental services;
- Resource Mother/Nurse case management (through CMO staff); and
- Non-emergency transportation.

Resource Mother/Nurse case management (through CMO staff) outreach is available to Medicaid eligible women enrolled in the LIM and ABD classes of assistance who deliver a VLBW infant. All of their other service needs are met through their full Medicaid eligibility.

A unique aspect of the P4HB program is that participants must select a CMO, with its affiliated provider network, through which their family planning and IPC services are delivered. Once deemed eligible for the Demonstration, women have 30 days in which to choose a CMO. Women already enrolled in a Georgia Families CMO, who are losing Medicaid or CHIP

coverage, may choose to stay with their current CMO or choose a new CMO if desired. Women enrolled in the IPC program have access to the CMOs' primary care and family planning providers as well as a nurse case manager and Resource Mother. Nurse case managers and Resource Mothers take part in coordinating care for the women in the IPC and the Resource Mother only components of the program and linking them with community-based resources and programs.

Demonstration Objectives

The primary goal of the Demonstration is to reduce Georgia's LBW and VLBW rates. The following related objectives were identified to effect achievement of the goals of the Demonstration:

- Improve access to family planning services by extending eligibility for these services to the newly eligible women noted above during the three years of the Demonstration.
- Provide access to interpregnancy primary care health services for eligible women who deliver a VLBW infant during the three year term of the Demonstration.
- Decrease unintended and high-risk pregnancies among Medicaid eligible women.
- Decrease late teen pregnancies by reducing the number of first or repeat teen births among Medicaid eligible women ages 18-19 years.
- Decrease the number of Medicaid-paid deliveries from the number expected to occur in the absence of the Demonstration beginning in the second year.
- Increase child spacing intervals through effective contraceptive use to foster reduced LBW rates and improved health status of women.

- Increase consistent use of contraceptive methods by providing wider access to family planning services and incorporating care coordination and patient-directed counseling into family planning visits.
- Increase family planning utilization among Medicaid eligible women by using an outreach and public awareness program designed with input from family planning patients and providers as well as women needing but not receiving services.
- Decrease Medicaid spending attributable to unintended births and LBW and VLBW babies.

These objectives point to several quantifiable performance measures that will be gauged pre- and post- implementation of the demonstration as discussed in the next section.

Demonstration Evaluation Objectives

This Demonstration's evaluation uses a quasi-experimental design, where possible, to test for changes pre and post the Demonstration in the following performance measures:

- Total family planning visits per poor and near poor woman;
- Use of contraceptive services/supplies per poor and near poor woman;
- Use of interpregnancy care services (primary care and outreach) by women with a VLBW delivery;
- Average interpregnancy intervals for poor and near poor women;
- Average interpregnancy intervals for women with a VLBW delivery;
- Teen and repeat teen births for poor and near poor 18 and 19 year olds;
- Rate of LBW and VLBW deliveries among the Medicaid population with comparisons to the statewide rates for LBW and VLBW deliveries;

- Rate of LBW and VLBW deliveries[2] among poor and near poor women and among Medicaid enrolled women compared to other populations within the state;
- Rate of infant mortality among the Medicaid population with a comparison to the statewide rate for infant mortality;
- Rate of infant mortality[3] among poor and near poor women and among Medicaid enrolled women compared to other populations within the state.

The objectives of the evaluation are to test not only for changes in the performance measures pre and post P4HB but to assess whether there is evidence of a causal pathway through the expanded access P4HB provides. In order for P4HB to achieve significant changes in these measures, sufficient numbers of eligible women in the community must enroll such that there is an increase in the overall use of family planning services/supplies among low-income women or an increase in consistent use of more effective contraceptive methods than would otherwise occur. Increased use of contraceptives and, in particular, use of methods of higher effectiveness among the Demonstration's participants should lead to reduced rates of unintended pregnancies and in turn, unintended births among this population of women (as well as improved interpregnancy intervals). Since teens are at high risk of unintended pregnancies, another anticipated effect should be that the rate of unintended births and repeat teen births falls post the Demonstration.

A key hypothesis is that these changes will be sufficient to lower the number of overall Medicaid paid pregnancies and deliveries/births and hence, costs, such that the state and federal government will ultimately realize a net cost savings despite increased spending on family

[2] While we include assessment of the rate of very low birth weight deliveries as a performance measure, we note that our power to detect differences will be limited due to the smaller number of IPC participants, the relatively short time period of the Demonstration over which these downstream outcomes can be observed, and potentially low participation rates.

[3] While we include assessment of the rate of infant mortality as a performance measure, our power to detect differences in this outcome will be limited by its relatively low incidence and the issues noted above.

planning and interpregnancy care related services. Since Medicaid birth rates are highly variable and can be affected by external factors (such as unemployment, wage/income changes) estimates of 'averted births' used in budget neutrality tests in most states' demonstration programs are based in part, on births actually observed within the demonstration enrollee or participating (users) group of women. While the P4HB evaluation will include this measure, the real budget neutrality test for the P4HB program is whether there is an overall shift in the distribution of infants across birth weight categories. If the Demonstration causes changes such that there are relatively fewer low birth weight and very low birth weight infants born to Medicaid enrolled women in Georgia, total expenditures should be lowered for the state and federal government.

II. SUMMARY OF SECOND YEAR ACTIVITIES

Communication and Outreach

During the second program year of the Demonstration (PY2), DCH and each of the participating Care Management Organizations (CMOs) continued their efforts to increase awareness of the P4HB program as well as encourage participation by both consumers and providers. We summarize these communication and outreach efforts below.

DCH Supported Activities

In PY2, DCH continued to follow its multi-pronged communication plan which incorporates five (5) specific phases for the marketing of P4HB throughout the state: 1) educate providers and CMOs; 2) leverage strengths and assets of partners; 3) implement consumer-based outreach; 4) use existing resources for support and coaching; and 5) annual evaluation. Two new activities

related to provider education were added to Phase 1. Each of these phases is described in the table in Appendix A and discussed below. The DCH link for the P4HB program is: http://dch.georgia.gov/planning-healthy-babies.

1. **Educate Providers and CMOs.** DCH continued to conduct provider education and outreach throughout the state. These related activities included distributing numerous educational and training materials to the CMOs, the Georgia Family Planning Program's (Georgia Title X Grantee) staff, and numerous provider organizations throughout the state. In May 2012, DCH staff members made a presentation to the Medical Care Advisory Committee of DCH about P4HB. In June 2012, these same staff members presented an update regarding P4HB to the state's Title X Women's Health Coordinators during their meeting in Macon, Georgia. In addition, DCH added two new provider activities (Phase 1), including 1) adding the provider handbooks to the P4HB website and 2) updating the P4HB website to include additional program information.

   In addition, DCH continued to work with the CMOs to refine and implement two additional provider surveys. These surveys, implemented in April and September 2012, helped to inform DCH and the CMOs about their network providers' knowledge and understanding of the P4HB program and potential barriers that existed in the first two years of the program. The results of the provider surveys are discussed in section IV of this report.

2. **Leverage Strengths and Assets of Partners.** DCH provided additional training and educational materials (blast fax, P4HB materials) to the following provider organizations: Georgia Primary Care Association; Georgia Association of Family Physicians (GAFP);

Georgia Chapter of the American Academy of Pediatrics (GAAAP); and the Georgia Obstetrical and Gynecologic Society (GOGS). In May 2012, DCH staff members conducted site visits to view the CMOs' IPC case management tracking systems and discuss any concerns regarding the IPC component of the P4HB program. These visits were well received by the CMOs' staff members. DCH and Emory University also worked to develop and implement webinars for staff members of the NICUs in Georgia with the goal of encouraging them to inform eligible women about the IPC component and facilitate their completion of program application materials. Each webinar described the P4HB program, the IPC services available through P4HB for women who deliver a VLBW infant, and the enrollment process with emphasis upon ways in which the NICU social workers and staff could facilitate eligible women's enrollment in the program. Three webinars were delivered during 2012.

3. **Consumer-Based Outreach**. DCH continued to conduct extensive client outreach during 2012. RSM staff made over 1,600 presentations about the P4HB program to interested individuals throughout the state. P4HB client outreach activities ranged from health fairs to radio public service announcements to church meetings and visits to children's hospitals and youth development centers. RSM staff made one-on-one presentations as well as presented at large-scale group information sessions. Attendance at most outreach activities was high, with several activities being attended by over 1,000 people. Examples include:

   - RSM workers promoted P4HB in January 2012 at a Harlem Globetrotter Benefit Basketball game attended by over 1,000 people.
   - In March 2012, RSM workers promoted P4HB to over 2,000 participants of the Belks KIDS FEST in Lowndes County.

- In April 2012, RSM workers promoted P4HB in Fulton County to 1,000 people at the Georgia Dome and at Atlanta Technical College.
- In May 2012, RSM workers promoted P4HB in Clayton County to 1,000 people at the Swing into Spring at Star Park event
- In July 2012, RSM workers promoted P4HB in Jeff Davis County to 1,300 people at the Back to School - Focus on the Family event.
- In August 2012, RSM workers promoted P4HB to 2,000 people at the Fannin County Rodeo.
- In October 2012, RSM workers promoted P4HB to over 10,000 people at the Paulding County Trick or Treat Village.
- In December 2012, RSM workers promoted P4HB in Jones County to 1,000 people at the Annual Christmas Parade celebration.

A detailed list of all DCH specific outreach activities has been included in the quarterly reports submitted during PY 2 to CMS. Examples of additional outreach activities that occurred during PY 2 include:

- **Maintained ongoing communication with family planning and OB/GYN providers**: DCH communicated with family planning and OB/GYN providers to inform them about P4HB.

- **Ongoing engagement of providers involved in High Risk Pregnancies**: The Georgia Families CMOs were continually encouraged to increase their outreach to their network providers who provided care for these high risk pregnant women.

- **Ongoing engagement of Georgia's Title X Family Planning Program:** Georgia's

Title X Family Planning Program shared data on a quarterly basis with the P4HB evaluation team at Emory.

- **Ongoing collaborations with the Georgia Department of Public Health (DPH) and the Georgia Department of Human Services Division of Family and Children Services (DFCS):** These collaborations aimed to further outreach to teens and young women who were uninsured and either paying out of pocket for family planning services/supplies or going without needed services. Our partnerships helped us reach women in the local public health department clinics and the DFCS offices. Some of these efforts were reflected in the local meetings held by RSM workers across the state.

- **Develop and implement an interview/survey for the IPC enrollees:** DCH worked with Emory to develop interview questions for the IPC enrollees that focused on: reproductive health/birth spacing; birth control methods and barriers to getting them; nutrition; chronic conditions; protection from infections; management of stressors and social issues; substance abuse; and dental health. These questions were included in the 2013 surveys.

4. **Using Existing Resources for Support and Coaching.** The goal of this activity was to use current and available resources in Georgia to promote prenatal care, healthy lifestyles before and during pregnancy, and smoking cessation. DCH accomplished this goal by contacting Georgia's WIC program as well as POWERLINE, a telephone resource sponsored by Georgia's Healthy Mothers, Healthy Babies program, to inform them about the P4HB

program. DCH also included these resources on the P4HB program's website and in other marketing materials.

CMO Supported Activities

The CMOs individually developed their own client and provider education action plans related to P4HB. To date, the Georgia CMOs have posted information about the P4HB program on their respective websites (https://www.myamerigroup.com/English/Medicaid/GA/Pages/P4HB.aspx; http://georgia.wellcare.com/member/p4hb; http://www.pshpgeorgia.com/2011/02/18/planning-for-healthy-babies-program-p4hb-effective-january-1-2011/langswitch_lang/es/).

Major client-related outreach efforts included: new member welcome calls to all newly enrolled P4HB members; telephonic outreach to members with VLBW deliveries to educate them on the IPC program; mailing of program materials (including contraceptive benefit information) to all new and existing P4HB members; enhanced call scripting for call center staff to educate P4HB members on the importance of understanding their benefits and services; home visits to outreach members unable to be reached by phone; distribution of a postcard to new members that emphasized the importance of utilizing contraception and reporting such use on the member secure web portal; on hold messaging to include information about types of contraception covered in the plan; quarterly incentives to members to encourage them to report birth control methods; hiring new Resource Mothers to conduct expanded IPC outreach and enrollment; and baby showers held with community members to educate them about P4HB.

The CMOs' provider and community related outreach efforts included: telephonic outreach to providers to educate them on the P4HB program; local face to face outreach to community partners (DFCS, WIC, Health Departments, and Birthing centers); and collaboration with the March of Dimes for the Southeast region for outreach to NICU staff who would interface with the Medicaid eligible women delivering infants who were subsequently admitted to the NICU.

Major Changes in the Year

In December 2011, DCH implemented a system to auto-enroll women who had delivered babies under the RSM eligibility criteria into the FP only component of P4HB. These RSM women were automatically eligible for the family planning only component of the Demonstration. This system also began auto-enrolling 19 year olds as they 'aged out' of the PeachCare for Kids® program – Georgia's stand-alone CHIP program. RSM and PeachCare for Kids® women received a letter informing them about P4HB, their option to opt out of the program and their option to select a new CMO. If a new CMO was not chosen, the women would remain in the current CMO to receive their P4HB services. In April 2012, DCH began auto-enrollment of IPC eligible women. Each of the three CMOs provided DCH quarterly data that reflected the women who had delivered a VLBW infant. Based on these monthly reports, DCH sent a letter to each IPC-eligible woman informing her that she would be auto-enrolled in P4HB unless she opted out.

Based on our 2012 statistics, this auto-enrollment process expanded knowledge of the P4HB program and increased enrollments as women did not need to submit a new application for the

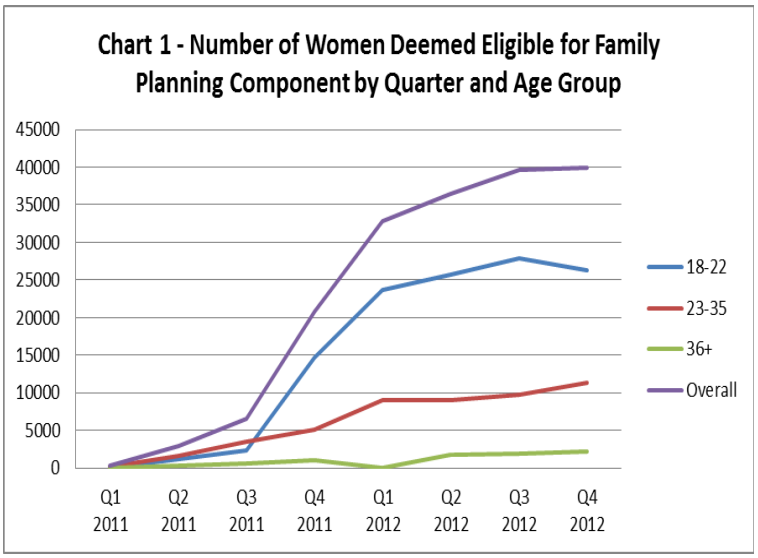
P4HB program but instead their enrollment into the P4HB program was considered to be a Continued Medicaid Determination.

III. ENROLLMENT AND PARTICIPATION

In our first year report, we provided a summary of the P4HB enrollment process and the barriers to enrollment that could occur as well as the auto-enrollment process. We note that the auto-enrollment of P4HB family planning only enrollees continued throughout the second year and hence, affected the numbers and patterns seen in the data presented here in the Year 2 Annual Report.

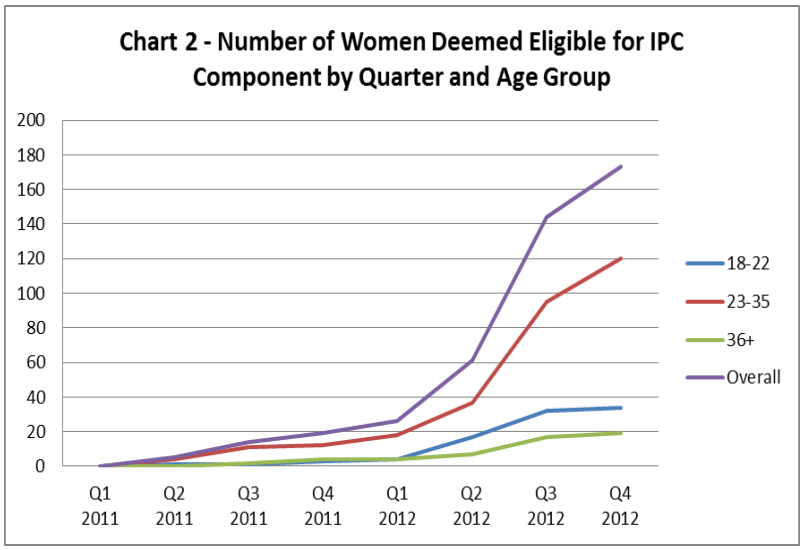
Enrollment Trends

There was evidence of continued interest in the P4HB in the form of calls to the call center, enrollee applications and the number of women deemed eligible by RSM staff through the second year of the program. As shown in Chart 1, the number of women deemed eligible for the family planning only component of P4HB grew through the end of the 3rd quarter of 2012 and then leveled off at just below 40,000. Toward the end of PY2, there was a slight decline in women ages 18-22 deemed eligible; the number deemed eligible in this age range peaked at almost 28,000 in the 3rd quarter and declined to a little over 26,000 in the 4th quarter 2012. The



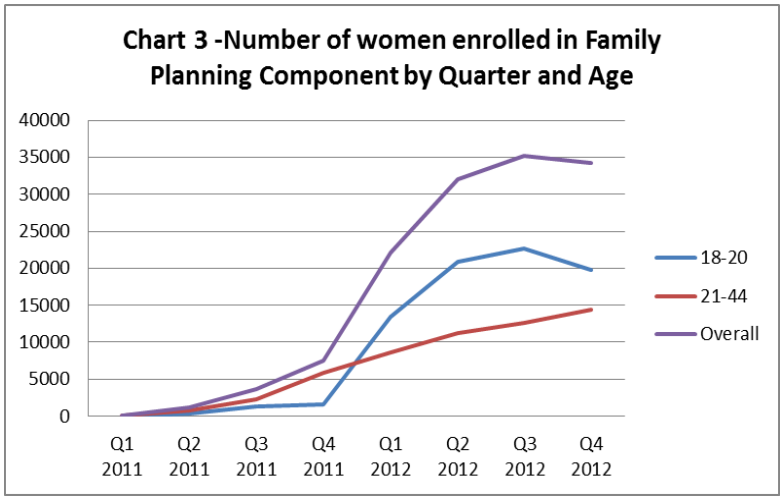
only age group for which there was continued growth in numbers deemed eligible through the end of 2012 was the 23-35 year old group. This group grew from 9,023 in the 1st quarter 2012 to 11,316 in the last quarter.

The number of women deemed eligible for the IPC component of the Demonstration, as shown in Chart 2, grew markedly during the second year of P4HB and resulted in a total of 173 deemed eligible by the end of the second year. The great majority of these women were in the 23-35 year old age group and their numbers grew from 18 in the first quarter of 2012 to 120 by the end of the 4th quarter 2012. There were a total of 34 women in the 18-22 year old age group and 19 in the oldest age group, deemed eligible for the IPC component of P4HB by the end of this second year.



By the end of PY2, the number of women actually enrolled in one of the CMOs to receive family planning only services (34,184) was less than the 39,889 deemed eligibile for this component as depicted in Chart 3 by age group. The data in this chart are shown for two age groups which reflect a change in reporting made toward the end of the Demonstration's first program year. The original counts of women enrolled in the family planning and IPC

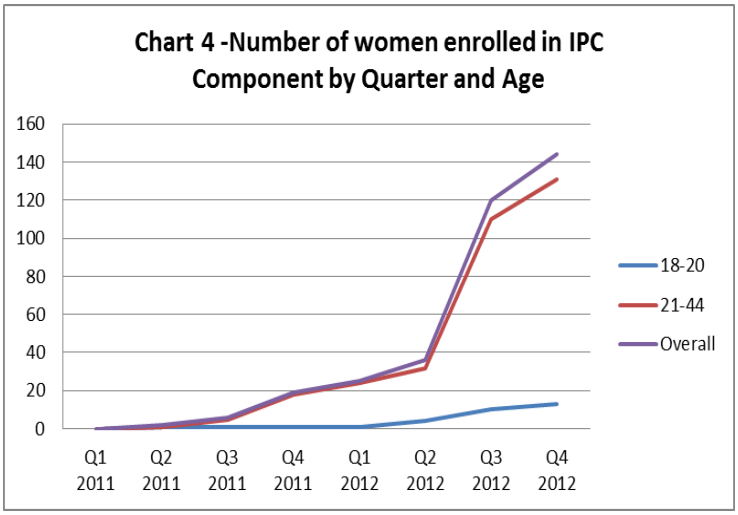
components were generated from ad hoc and member services reports. Toward the end of CY 2011, DCH staff created new report specifications for the Medicaid Management Information System (MMIS) so that it would accurately reflect the Demonstration's membership. The data contained in this new report was used for the fourth quarter 2011 Demonstration Report and all four quarterly reports for 2012.



As shown in Chart 3, the patterns of enrollment indicate an upturn in the fourth quarter of 2011 that continued for the 21-44 year old group through all of 2012. The steep increases in enrollment for those in the 18-20 year old group continued through the 3rd quarter of 2012, peaking at 22,679. Unfortunately, those increases were not sustained and an enrollment decline was evident by the end of the 4th quarter 2012, with enrollment for this age group dropping to 19,831. The gap between the number of women deemed eligible and the number enrolled in the family planning component of P4HB seen in the first year was narrowed markedly. This trend will be monitored during the third year of the Demonstration to see if it continues. We also note that the overall increase in enrollment during the second year of P4HB was driven in part by the auto-enrollment policy. Using a list of study IDs for women auto-enrolled in the P4HB family planning only component at some point during 2011 or 2012, we found a total of 61% were auto-enrolled into the program during this time period. Given this high percentage, if these enrollees

exhibit different behaviors regarding the use of family planning services or pregnancy during their time enrolled, the overall patterns among family planning only enrollees in P4HB will be affected. We therefore provide some separate statistics for these women at certain points in the remainder of this report.

Over 80% of the Demonstration participants deemed eligible for the IPC component were actually enrolled in a CMO by the end of 2012 (144 of 173 deemed eligible) as we see in Chart 4. All of the enrolled women were in the 21-44 age range and the overall growth reflected the growth in enrolled women in this age group. Some of this growth was due to auto-enrollment into the IPC component which was instituted as of April 1, 2012. This process involved the CMOs reporting on very low birth weight deliveries to DCH who then worked with its enrollment broker to enroll these women into the IPC component of P4HB. Letters were also sent to these women notifying them that they would be auto-enrolled once their pregnancy eligibility status ended.



The numbers enrolled in the Resource Mothers only component of the P4HB program totaled 77 by the end of PY2. Combined with the 144 women enrolled in the IPC component, there were 221 women who had delivered VLBW infants and were now receiving nurse case management

and Resource Mother services, in addition to the primary care and other IPC services, by the end of PY2.

Participation Rates

In order to fully assess the rate of enrollment that occurred in PY 2 for the P4HB program, we have to again consider the total number of women likely eligible for P4HB in the communities across Georgia. Since the program largely targeted women ages 18-44 not otherwise insured and under 200% FPL, we used data from the American Community Survey (ACS) for 2011 to estimate the number of uninsured women in this age and income range in PY 2. While some of these uninsured women were eligible for traditional Medicaid in Georgia (and apparently not taking up these benefits), they were only eligible for family planning only benefits under P4HB. This number excludes women who were non-citizens and hence, not eligible for the Demonstration. As shown below in Table 1, we estimated that the P4HB program enrolled less than 3% of the total number of women estimated to be eligible and in the community based on income, age and citizenship (256,979 from ACS) in 2011. The ACS data have been more readily available as the survey has grown in size and timeliness; using data from its three year 2011 public use micro sample we estimate 279,308 uninsured women citizens in Georgia in the age and income group targeted by P4HB in 2012. Using this as the denominator, we estimate around 12% of the eligible population was enrolled in the family planning only component of P4HB in PY 2.

Table 1 Enrollment of Population Eligible in the Community

Demonstration Group	Enrolled in 4th Quarter	Population Eligible in Community[1,2]	Percent Eligible Enrolled
FP Only 2011	7,543	256,979	2.9%
FP Only 2012[3]	34,184	279,308	12.2%
FP Only 2012	34,184	152,223[4]	22.5%
IPC/Resource Mother Only	221	1,522	14.5%

[1]*Those eligible for family planning only benefits are uninsured female citizens ages 18-44 with income < 200% FPL and residing in Georgia. The estimated number of uninsured women in this age and income range was estimated at 256,979 for 2010 and 279,308 for 2011.*

[2]*Those eligible for IPC include uninsured women 18-44 with income < 200% FPL residing in Georgia with a liveborn infant under 1500 grams at delivery. Women enrolled in RSM with a VLBW infant should be the denominator for this calculation. Those eligible for Resource Mother only include LIM and ABD Classes of Eligibility women with a VLBW infant. We combine the enrollment counts for IPC and Resource Mother for the numerator and use all Medicaid paid VLBW births (n = 1,522 in Table 3 shown later) as the denominator.*

We use the 34,184 number enrolled as of the 4th quarter for consistency with the earlier parts of the report.

[4] *This denominator adjusts for women in need of family planning services based on a report from the Guttmacher Institute. Their estimate is that 54.5% of women in the age group 13-44 were actually in need of family planning services. We multiplied the "in the community" population by .545 to get the 152,223 in row 3, column 3. See:* http://www.guttmacher.org/pubs/win/contraceptive-needs-2008.pdf.

While this family planning only participation rate is not as high as desired, it does show significant improvement in terms of outreach and enrollment of eligible women as the percentage of eligible women enrolled quadrupled from around 3% to over 12% in this second year. When we consider that only an estimated 54.5% of the eligible population may be 'in need' of family planning services (sexually active, able to get pregnant, not currently pregnant or trying to get pregnant) the estimated percentage enrolled jumps to 22.5%. A caveat is that a larger percentage of these enrollees were auto-enrolled, as noted earlier. We also note that a large number of women in need of family planning continue to be served by the Title X program in Georgia and we report on changes seen in this program pre and post implementation of the P4HB program in terms of Medicaid coverage, rates of use of contraceptives and types of contraceptives used. We also estimate unduplicated counts of family planning visits in both Title

X and Medicaid in order to assess whether the P4HB program increased the use rates across the two programs as shown later.

The P4HB program also enrolled a much larger percentage of women with a VLBW infant into the IPC and Resource Mother only components of the program. Of the total 1,522 births estimated to be in the VLBW category (see Table 1) in Year 2, a total of 221 were enrolled in one of these two components. This means almost 15% of these women were enrolled, up from only 1.6% in Year 1. While this is a major improvement, there is still the need for intensive education and outreach to health care providers who care for or interface with women with a very low birth weight delivery (e.g., obstetrical care providers and nurses, neonatal care providers and nurses) as well as significant efforts to keep the application process user-friendly and accessible in the community**.**

IV. PROVIDER SURVEYS ROUNDS 1-3

As part of the P4HB program the CMOs, in collaboration with the DCH, monitored member and provider overall knowledge and understanding of P4HB approximately bi-annually through an analysis of member and provider surveys. Analyses of these surveys served to help the CMOs and DCH better understand and improve member and provider experiences with the P4HB program, as it is important to both the CMOs and DCH to identify any area that could negatively impact the satisfaction of their members and providers who participate in the program. We briefly describe the survey methods used by the CMOs below and include in Appendix B the full set of responses to the provider and member surveys in each round. As of the end of 2012, the

member and provider surveys had been administered in three waves -- in December 2011, April 2012, and September 2012. The CMOs administered the first two waves of surveys to their members and providers then contracted with The Myers Group to administer the third and subsequent waves of the surveys.

We note that the surveys continue to be affected by low response rates among both members and providers and that due to the lack of information regarding the rosters used by the CMOs and The Myers Group, we were not able to discern how many of the same members or providers were responding to the survey across all 3 wavers. To the extent the same enrollees respond with each wave, the answers may be biased toward longer term enrollees. We also note that the second through third waves of the member surveys are affected by the large percentage of auto-enrolled members during the 2012 time period. We summarize here the key findings from these surveys for providers; we note that results for members were reported in the 2013 third Quarterly Report to CMS.

Summary of Provider Survey Results Rounds 1-3

For each of the three waves of the survey administration, a total of 1140, 1140, and 1292 providers met the selection criteria for the survey; of those eligible, a total of 62, 104, and 31 participated in the survey for each of the three waves, respectively, for a participation rate of 5.4%, 9.1%, and 2.4% . The respondents to the health care provider survey represented the range of CMO affiliations (with providers being affiliated in most cases with multiple CMOs): 79%, 80%, and 94% respectively, were affiliated with Amerigroup for each of the three waves of the

survey; 81%, 82%, and 74% respectively with Peach State; 95%, 95%, and 94% respectively with WellCare; and 84%, 83%, and 71% with fee-for-service Medicaid. Among the responding providers, the provider type varied across the surveys. The percentage of responding providers who were MD/DOs were 52%, 59%, and 90% respectively, for each of the three waves of the survey. For the first and second wave of the survey, respondents reported the following areas of specialization (with the option of selecting one or more specialty areas of practice): 22% and 25% obstetrics/gynecology, 14% and 13% women's health, 16% and 17% family practice or primary care, 13% and 15% family planning, 11% and 8% pediatrics, 6% and 4% general practice, 5% and 4% internal medicine, 11% and 10% other. For survey waves 1 and 2, the majority of respondents reported they provided health care services in private practice (58% and 63%, respectively), but substantial percentages reported providing services in community health clinics or federally-qualified health centers (17% and 15%), public health departments (17% and 16%), or other settings (8% and 7%). The third wave of the survey did not ask providers about their provider type or site of practice.

For each of the three waves of the survey, 81%, 83%, and 90% of the responding providers, respectively, indicated they were accepting new Medicaid patients; and 71%, 78%, and 84% indicated they were providing family planning or primary care services to women of reproductive age (ages 18-44 years); however, only 61%, 64%, and 61% respectively, reported being aware of the Georgia P4HB program despite the CMOs sending the survey to those they believed to be participating providers.

Only the first and second waves of the survey asked providers about how they learned about the program. Of the 38 and 67 provider respondents, respectively, who were aware of the P4HB program, they reported learning of the program in the following ways: 42% and 45% mailings from the CMOs, 42% and 39% e-mails from the CMOs, 26% and 21% meetings hosted by DCH, 24% and 24% from information initiated by DCH, 13% and 12% telephone calls with CMOs, 11% and 19% websites of the CMOs, and 8% and 7% patients asking about the program. Key findings of the provider survey are summarized below, according to major themes explored by the survey:

Provider knowledge of eligibility criteria:

- For all three waves of the survey, fewer than half of all providers had correct knowledge about all of the eligibility criteria;
- From the first through the third waves of the survey, there were improvements in the percentages of providers correctly identifying the eligibility criteria of age between 18-44 years (from 40% to 45%), being a Georgia resident (from 42% to 48%), being a U.S. citizen (from 39% to 42%), not otherwise eligible for Medicaid or CHIP-PeachCare for Kids® (from 31% to 32%), and not otherwise covered for family planning services (from 26% to 32%).
- Less than one-third of responding providers knew that the delivery of a VLBW infant since January 1, 2011, is an eligibility criterion for the IPC component with some improvement across the three waves of the survey (24%, 21%, and 26% respectively).

Provider knowledge of covered services:

- From the first through the third surveys, there were improvements in the percentages of providers with knowledge of all of the covered family planning services;

- Provider knowledge of covered interpregnancy care services was more variable across the three waves of the survey:
    - 19%, 16%, and 23%, , respectively, for primary care services;
    - 9%, 11%, and 6%, respectively, for management and follow-up of chronic conditions;
    - 8%, 9%, and 10%, respectively, for prescription medications for chronic conditions;
    - 5%, 5%, and 3%, respectively, for detoxification and outpatient rehabilitation;
    - 6%, 7%, and 6%, respectively, for limited dental services;
    - 16%, 14%, and 19%, respectively, for nurse case management and resource mother outreach;
    - 8%, 6%, and 16%, respectively, for non-emergency transportation.

Provider perception of barriers:

- From the first through the third surveys, the percentage of providers reporting perceived barriers to client participation in the P4HB program increased:
    - 26%, 26%, and 35%, respectively, perceived lack of coverage of the full range of family planning services as a barrier;
    - 27%, 27%, and 39%, respectively, perceived lack of coverage of referrals or follow-up care;
    - 26%, 26%, and 26%, respectively, perceived lack of coverage of complications of family planning services.

Provider information needs and preferences:

- Across the three waves of the survey, one-third to nearly two-thirds of providers reported a need for more information about enrollment eligibility criteria and covered services for the Family Planning and the Interpregnancy Care components;

- The most favored routes of receipt of information according to the first two waves of the survey (the questions were not included in the third wave of the survey) were websites of the CMO's (100% and 9%, respectively), e-mails to the practice (34%, and 37%, respectively), and direct mailings (32% and 28%, respectively).

V. DATA ON DELIVERIES AND INFANTS

In this section we report on the total counts of deliveries and infants by birth weight category as derived from the administrative claims/encounter data provided by DCH to Emory through its data sharing agreement. We begin with the data for CY2012 to reflect the second year of the P4HB. As in our Year 1 Annual Report, we provide details of the methods in the footnotes of the following tables on the specific billing codes found within the Medicaid claims data that were used to define deliveries (unduplicated using the mother's ID), to categorize them by liveborn, stillborn (≥ 22 weeks' gestation) or fetal deaths (<22 weeks' gestation) and to further categorize liveborn infants (unduplicated using the infant's ID) according to the birth weight categories as found on the infants' records. We have changed, as noted in our Executive Summary, the codes used in this process. Specifically, we use ICD-9 diagnosis codes predominantly through this process instead of DRGs as this coding was incomplete in the CMO encounters starting in 2011.

Again, we are not able to capture information on the birth weight of all infants from the administrative records and hence, can only categorize the birth weight of those deliveries for which we had a linkage between the mother and infant (provided by Truven Health Analytics).

As the P4HB program and its evaluation has moved forward, these administrative records have been linked to data from the Department of Public Health's (DPH) vital records unit for 2009-2011 and used to confirm birth weight and gestational age and will be used to obtain additional information on the mother (socio-demographics, evidence of chronic health conditions and complications of the pregnancy, smoking, etc.). We report on trends in births and birth weight for the 2009-2011 time periods in later tables in this report.

Counts of Deliveries and Costs 2012

The data in Table 2 below show that there were a total of 78,190 Medicaid paid deliveries occurring in calendar year 2012 based on the claims data; we note that this count omits an additional 3,176 deliveries for which there was an indicator of private third party liability (including Medicare) at time of delivery or the amount Medicaid paid was zero. Based on the count of deliveries paid fully by Medicaid, 69,643 of the total 78,190 could be categorized as liveborn deliveries while 7,505 or 9.6 % of the total were coded as fetal deaths of < 22 weeks gestation and 1,042 were coded as stillborn deliveries. The 69,643 liveborn deliveries paid fully by Medicaid were estimated to cost the Georgia Medicaid program almost $360 million with an average of $5,175 per delivery.

Table 2 Medicaid Deliveries for Calendar Year 2012 (CY2012)

MEASURE	Counts	Total $ Paid Mother	Average $ Paid Mother
All Medicaid Deliveries[1]			
Total Deliveries[2]	78,190	371,589,078	4,752
Liveborn deliveries	69,643	360,421,486	5,175
Stillborn deliveries (>= 22 weeks)[1]	1,042	4,091,650	3,927
Fetal deaths < 22 weeks[1]	7,505	7,075,942	943
Deliveries[1] to Demonstration			
Entire Demonstration population			
Total Deliveries	664	3,176,506	4,784
Liveborn deliveries	562	3,054,336	5,435
Stillborn deliveries (>= 22 weeks)[1]	12	34,603	2,884
Fetal deaths < 22 weeks[1]	90	87,567	973
FP only[3]			
Liveborn deliveries	561	3,047,727	5,433
Stillborn deliveries (>= 22 weeks)[1]	11	32,874	2,989
Fetal deaths < 22 weeks[1]	90	97,567	973
IPC [4]			
Liveborn deliveries	1	6,609	6,609
Stillborn deliveries (>= 22 weeks)[1]	1	1,729	1,729
Fetal deaths < 22 weeks[1]	0	0	0
Resource Mother only[5]			
Liveborn deliveries	0	0	0
Stillborn deliveries (>= 22 weeks)[1]	0	0	0
Fetal deaths < 22 weeks[1]	0	0	0

[1] Deliveries were defined as human conceptions ending in live birth, stillbirth (>= 22 weeks gestation), or fetal death (< 22 weeks). Ectopic and molar pregnancies and induced terminations of pregnancy were NOT included.

- ***Deliveries of Live births** were identified in the claims by using: ICD-9 diagnostic codes 640-676 plus V27.x **OR** ICD-9 procedure codes 72, 73, or 74 plus V27.x **OR** CPT-4 codes 59400, 59409, 59410, 59514, 59515,59612,59614,59620, 59622 plus V27.x*
- ***Deliveries of Stillbirths** were identified by using ICD-9 code 656.4x (intrauterine fetal death >= 22 weeks gestation) OR specific V-codes [V27.1 (delivery singleton stillborn, V27.3 (delivery twins, 1 stillborn), V27.4 (delivery twins, 2 stillborn), V27.6 (delivery multiples, some stillborn), V27.7 (delivery multiples, all stillborn)].*
- ***Deliveries associated with Fetal deaths** < 22 weeks were identified by using ICD-9 codes 632 (missed abortion) and 634.xx (spontaneous abortion).*
- *In the case of a twin or multiple gestations, the delivery was counted as a live birth delivery if ANY of the fetuses lived. Costs were accumulated over the pregnancy and attributed to the delivery event if there was a fetal death (632) that preceded a live birth.*

[2] This count of total deliveries omits those with $0 Medicaid dollars, private third party liability or Medicare coverage (n = 3,176). If these records were included the number of deliveries would be 81,366 with 72,340 liveborn deliveries, 1,105 stillbirths and 7,921 fetal deaths.

[3] Family planning only participants were identified using Aid Eligibility Code = 181; all deliveries that occurred to these women were after their first three months of continuous enrollment in the P4HB. Women who came into the program pregnant should not be counted and our methods for omitting them are described in the text.

*[4] IPC participants were identified using Aid Eligibility Code = 180. Only the deliveries and births to IPC women **subsequent** to their 3rd month of enrollment are reported in these tables.*

*[5] Participants in the Demonstration with Resource Mother only benefits are LIM and ABD classes of eligibility with a delivery and VLBW birth weight infant in the year. They were identified using Aid Eligibility Codes 182 (LIM) and 183 (ABD). Only the deliveries and births to women with LIM and ABD classes of eligibility **subsequent** to their 3rd month of enrollment are reported.*

Because the great majority of infants receive their own Medicaid ID at birth, the Medicaid amounts paid shown in Table 2 are largely representative of those expenses incurred for care of the mother at the time of the delivery hospitalization. In addition to the costs for the deliveries with liveborn infants, Georgia Medicaid incurred costs totaling just over $11 million for deliveries ending in fetal death or stillborn infants in CY2012. Since overall trends in fertility

affect the changes from Year 1 to Year 2, we report later on the trends in counts of births and average amounts paid by Medicaid over the full 2009-2012 time period for which we have data.

In the bottom portion of Table 2, we show the counts and costs of any deliveries observed for women enrolled in the FP, IPC or Resource Mother only components of P4HB. Our first step in defining P4HB enrollees in this table was to identify the subset of women with a P4HB eligibility code who had three months of continuous enrollment in a CMO. The program staff assumed the member would have their family planning appointment within the first month of CMO enrollment and if the woman started on some form of contraception at the beginning of the second month, two months are allowed for the method to become effective before any subsequent pregnancy is considered a failure – hence the required 90 days of continuous CMO enrollment. We also omitted women with an indication of a pregnancy using ICD and/or RSM eligibility codes in these first 3 months of CMO enrollment and those with a delivery $\leq$ 245 days after enrollment in a CMO since they most likely came into the CMO in a pregnant status. The number of pregnancies (1,035) and birth outcomes (215) found in this process can be seen as a failure of women to understand the program and/or failure of the delivery system to get the women in for pregnancy testing/services in a timely fashion.

After making these omissions we have P4HB enrollees who we believe were not pregnant when they came in and for whom the CMO had 3 months to reach/serve. We then count pregnancies [ICD/RSM codes] in the 91st day forward and any delivery outcome [fetal death/live birth/stillbirth] after the 245th day among these women as a 'failure' of the program. The counts of outcomes for P4HB enrollees shown here and in later tables are to women enrolled

starting in January 2011 and running through October 2012; we stopped in October 2012 in order to allow for measurement of the 3 months of continuous enrollment.

We note that any system of classification of pregnancies as occurring before or after P4HB enrollment that is based upon claims data could result in misclassification of the timing of occurrence of these pregnancies. We have attempted to minimize the potential for this misclassification by applying the above rules. Importantly, once the claims/enrollment data are linked to vital records we will have a measure of gestational age of the birth and fetal death events such that we can more accurately define whether the pregnancies were conceived before or after P4HB enrollment. By counting deliveries/births which occur for these women only after the 245 day cut-off, we allow for births with a short gestation (~5 months) after the first 90 days of enrollment but will also include births with a longer gestation that may have begun in the first 3 months of enrollment but for which there were no pregnancy or RSM codes seen in the data we used to make omissions.

Using these methods, there were an estimated 561 liveborn deliveries in 2012 to women in the FP only component of the P4HB with total costs of over $3.0 million. There were an additional 90 fetal deaths and 11 stillbirths among the women enrolled in this component of P4HB with Medicaid costs of about $130,000. These outcomes in the second year of the Demonstration could be seen as 'failures' to prevent pregnancies and births among women enrolled since they are eligible for a wide range of family planning services and have been enrolled in a CMO continuously for 3 months. These women either decided to become pregnant or if wishing to avoid pregnancy, did not access and use birth control methods effectively. However, we cannot discern from claims data whether or not pregnancies are intended. We discuss later in this report

how the birth rate observed here compares to that 'expected' for women in the income range targeted by the P4HB program and to those observed in other states' family planning programs.

Also shown in the bottom section of Table 2 are births to the IPC and Resource Mother only enrollees. We identified that IPC enrollees only had one live birth and one stillbirth during 2012 after three months of enrollment in the program. It is important to note that the live birth was of normal birth weight but the delivery costs were higher than average at $6,609.

We note corrections to the counts reported in our Year 1 report are now possible with the additional claims run-out but will also be affected by the correction on data regarding the month of P4HB enrollment and updated eligibility files. We originally reported no liveborn deliveries or stillbirths observed for the P4HB participants and a total of 6 fetal death deliveries (< 22 weeks' gestation) among women enrolled in the FP only component of P4HB in CY2011. With the new version of extracted claims/enrollment data we found no fetal deaths or live births among family planning enrollees in the program for three or more months.

Counts of Infants and Costs 2012

In Table 3 below, we show the counts of infants identified with their own Medicaid IDs and categorized as a live birth or stillbirth. Note that the number of liveborn infants (78,824) is far greater than the number of liveborn deliveries shown in Table 2 (69,643). This may be due to multiple gestations but also an apparent undercount of total deliveries in the 2012 claims data available at this time. These numbers will be updated in future reports as more claims data are made available.

Given our new methods of classifying infant birth weight (see footnotes to Table 3), all liveborn infants have been classified. Previously, we had not categorized those with a missing DRG code. Of the 78,824 live births, a total of 1,522 or 1.9% were categorized as VLBW and 6,060 (1,522 plus 4,538) or 7.7% were categorized as LBW. We have noted that claims data tends to underestimate the percentage of LBW but overestimate the percentage of VLBW within this group. We will not get a reliable measure of the distribution of birth weight until more years of data are linked to vital records. We report later on the birth weight distributions for 2009-2011 where the data have been linked.

The data in Table 3 indicate that the costs of all live births were approximately $306 million and averaged to $3,889 per infant (Column 5). These costs are for the delivery hospitalization of the infant. We do see the anticipated pattern of higher costs for those infants born LBW or VLBW relative to those born normal weight. Average costs for infants of normal weight were estimated to be $1,750 (Column 5) while for those infants born LBW, costs were estimated at $11,651. Very low birth weight infants born during 2012 had an average delivery hospital cost of $82,949. The difference in costs for VLBW or LBW versus normal birth weight infants illustrates the cost savings that could occur by lowering the percentage of infants born VLBW.

In Table 3, we also include data for the delivery costs of the mothers by the birth weight category of their infant for those mothers who could be linked to an infant (Truven Health Analytics). These data indicate that the delivery costs for the mother also follow the pattern of higher costs for LBW and VLBW infants at the delivery hospitalization; the mother's costs at a delivery of a

normal birth weight baby were estimated at $5,214 while the mother's costs at delivery of a VLBW delivery were estimated at $6,558.

Table 3 Infant Counts and Costs for Mother and Infant at the Delivery Hospitalization Calendar Year 2012 (CY2012)

MEASURE	Counts	Average $ Paid Mother[3]	Total $ Paid Infant Delivery Hospitalization	Average $ Paid Infant Delivery Hospitalization
All Medicaid Live births [1]	78,824	$5,282	$306,520,261	$3,889
VLBW	1,522	$6,558	$126,247,882	$82,949
LBW	4,538	$6,024	$52,870,464	$11,651
Normal BW	72,714	$5,214	$127,261,005	$1,750
All Medicaid Stillbirths[2]	50	$5,467	$140,910	$2,818

[1]*Liveborn infants were identified and further categorized according to infant birth weight as very low birth weight (VLBW) < 1500 grams, low birth weight (LBW) 1500 – 2499 grams, and normal birth weight >= 2500 grams). Birth weight categories for liveborn infants were then defined using ICD-9 codes in the encounter data as follows:*

- *VLBW (< 1500 grams): ICD-9 = 764.xx or 765.xx or V21.3 that pertain to weight < 1500 grams*
- *LBW (1500 – 2499 grams): ICD-9 = 764.xx or 765.xx or V21.3 that pertain to weight 1500 = 2499 grams*

NBW (≥ 2500 grams): ICD-9 = 764.xx or 765.xx or V21.3 that pertain to weight ≥ 2500 grams or not otherwise classified as VLBW, LBW or stillborn.

[2] *Stillborn infants were identified using ICD-9 diagnosis codes V35.xx, 768.0, 768.1, or 779.9.*

[3] *Amounts paid for mothers at the time of delivery were summarized for all deliveries in Table 2 and are summarized here by birth weight of the infant for the subset of mothers (n =57,317) who could be linked to an infant based on the SSN of the head of the household.*

In Table 4, we provide the estimated costs to the Georgia Medicaid program of infants in their first year of life in the program. These costs are counted beginning with the claims and encounters for the first service date occurring after their delivery hospitalization discharge date in order to isolate the delivery versus first year of life costs. We can only analyze those 36,776 infants born in the first six months of 2012 due to the lag in claims data. The estimate is extrapolated based on the averages by birth weight category, applied to the infants born in the second half of the year based on their birth weight category and added to the actual total for those born in the first six months. As the costs are based on claims paid through June of 2013, estimates may not be complete even for these infants.

The total amount paid for infants regardless of their birth weight was estimated at $185.5 million. There was very little change in the average per infant costs when we adjusted for their

disenrollment from Medicaid (due to death or other causes). When total costs are estimated based only on the 35,412 of the 36,776 infants born in the first six months who were still alive and continuously enrolled through December 31, 2012, it is $182 million. There is the expected pattern of higher first year of life costs for infants of lower birth weight; costs for normal birth weight infants was estimated at $2,199 while costs for LBW infants was estimated at $3,710 and for VLBW infants, at $5,759. These cost patterns by birth weight hold for those not disenrolled due to death/other reasons as shown in the last column.

Table 4 Infant Costs for Medicaid Live Births During First Year of Life (Post-Delivery Hospitalization)

MEASURE	Infants[1] Born on Medicaid in First 6 Months of CY2012	1st Year of Life Post-Delivery Hospitalization			
		Average $ Paid per Infants[2]Born in First 6 Months of CY2012[6]	Total $ Paid[3] Extrapolated to All Infants[4] from those Born in First 6 Months	Total $ Paid Extrapolated to Continuously Enrolled Infants[5]	Average $ Paid per Continuously Enrolled Infants[5]
Medicaid Live births[1] in First 6 Months of 2012	36,776	$2,355	$185,511,836	$182,344,224	$2,369
VLBW	504	$5,759	$8,764,543	$8,764,322	$6,492
LBW	1,995	$3,710	$16,834,664	$15,960,050	$3,626
Normal BW	34,277	$2,199	$159,912,629	$157,619,852	$2,213

[1] The 36,776 liveborn infants born in the first six months of CY2012 were categorized as very low birth weight (VLBW) < 1500 grams, low birth weight (LBW) 1500 – 2499 grams, and normal birth weight >= 2500 grams) as noted in Table 14.

[2]Costs for all infants born in the first six months of CY2012 are included regardless of their disenrollment or death.

[3]Dollars paid for services for infants in their first year of life were counted beginning with the first service date occurring after their delivery hospitalization discharge date. Paid claims for infants born in CY2012 were complete through June of 2013; expenses paid after this date will not be counted in their first year costs.

[4]Costs for the full first year of the infant's life were only available for those infants born in the first six months of 2012 (and based on claims paid only through June 2013). We used the average costs for this cohort of infants born in the first part of 2012 (n = 36,776) to extrapolate to an annual estimate for CY 2012.

[5] Costs for all infants born in the first six months of CY2012 are included only for those 35,412 alive and continuously enrolled (data on enrollment were only available through December 31, 2012). We used the average costs for this cohort of infants (n = 35,412) to extrapolate to an annual estimate for CY 2012 as shown in the last column.

[6] Omits those with 0 Medicaid dollars, private third party liability or Medicare coverage

VI. SERVICE USE

IPC Service Use

A key goal of the IPC component of the demonstration is to help these mothers maintain or improve their health by providing access to the expanded set of services noted earlier. The administrative data can be used to ascertain the types of conditions for which these women are seeking and receiving care under the P4HB program. Among the IPC component's participants, the claims data indicate that 157 of the 235 women enrolled (67%) utilized services. The number of encounters for services by IPC component participants ranged from 1 to 70 with a mean of 6.8 encounters. Additionally, the claims data indicate that 61 of the 86 women enrolled (71%) in the Resource Mother only component of P4HB utilized services, with the number of encounters ranging from 1 to 62 with a mean of 13.1encounters. The ICD-9 diagnosis codes that appear in the claims data for these members are summarized below, separately for the IPC and Resource Mother only participants.

According to ICD-9 diagnostic codes within the Medicaid claims data, the use of services by women enrolled in the IPC component reflected the receipt of care for preventive services, acute gynecologic conditions or other gynecologic testing, dental conditions, other acute conditions, contraceptive services, and chronic health conditions. Examples of preventive health care services received were routine well-woman and gynecologic examinations (10), routine medical check-ups and other screenings (3), and vaccinations (3). Among the most common services utilized were those for acute gynecologic conditions or gynecologic testing (65), including for pelvic inflammatory disease (1), cervicitis (1), vaginitis (12), abnormal Pap smear and cervical dysplasia (15), as well as screening for sexually transmitted infections (3). Dental services that

were utilized included care for gingivitis or periodontitis (3) or other tooth infections (2). Services for care of acute conditions (132) were the most commonly utilized services. Examples of common acute conditions for which care was sought included respiratory tract infections and disorders (23), dysuria or urinary tract infection (18), abdominal pain (8), headache (6), and fatigue (5). Contraceptive management services were received by 8 of the enrolled women.

Table 5 below summarizes the specific ICD-9 codes reflecting chronic health conditions that were present in the Medicaid claims data for IPC and Resource Mother only participants.

Table 5 ICD-9 Diagnostic Codes for Chronic Conditions for IPC and Resource Mother Only Participants

Component of Program	**Chronic Health Condition** **Evidence from Claims Data**
Interpregnancy Care (55 of 235 members with evidence of chronic condition)	Hypertension (22) Thyroid disorder (7) Depression/Anxiety (22) Obesity/Overweight (15) Gastroesophageal reflex disease (6) Long-term medication monitoring (5) Migraine headache (5) Diabetes mellitus (4) Atopic dermatitis (1)
Resource Mother Only (18 of 86 members with evidence of chronic condition)	Diabetes mellitus (2) Hypertension (8) Diabetic eye disease (2) Depression (8) Valvular heart disease (2) Embolism with long-term anticoagulation therapy (1) Hyperlipidemia (1) Arterial disease (1) Gastroparesis (1)

Trends in Births, Averted Births and Budget Neutrality

We have focused in the earlier sections of the report on deliveries and births in 2012. It is important, as we move forward to further analysis, that we look over the full pre and post period of P4HB for which we now have claims data. It is also helpful to compare the information gained from the claims data regarding birth outcomes to that which we will eventually have from the linked Medicaid and vital records data. To this end, we provide a brief summary of the changes we are seeing in the numbers of deliveries and liveborn infants in the study years. As shown below (Table 6), the number of Medicaid paid births was declining prior to the Demonstration, declining from 85,370 in 2009 to 81,463 in the two years prior (2009-2010) and to a low of 75,087 in the first year (2011) of the P4HB program. Birth counts increased again in 2012 to 78,824.

Table 6 Number of Medicaid Paid Births by Year (2009-2012)

	2009		2010		2011		2012	
Weight Category	**N**	**Percent**	**N**	**Percent**	**N**	**Percent**	**N**	**Percent**
VLBW	1,718	2.0	1,650	2.0	1,506	2.0	1,522	1.9
LBW	4,679	5.5	4,547	5.6	4,210	5.6	4,538	5.8
Normal BW	78,890	92.4	75,187	92.3	69,331	92.3	72,714	92.3
Stillbirth	83	0.1	79	0.1	40	0.1	50	0.1
Total	85,370		81,463		75,087		78,824	

While these trends are consistent with the overall trends in the vital records data, the drop in 2011 is larger than seen in overall patterns and indicates perhaps an undercount of infants in the claims. In addition, the ratio of infants to deliveries was 1.05 and 1.06 in 2009 and 2010, respectively, but drops to 1.01 in 2011, a further indication of undercounts of infants. This ratio

climbs to 1.10 in 2012, an indication of an under count of deliveries in 2012 as noted throughout the report. These issues will be kept in mind as the evaluation proceeds.

Based on the claims data, the average paid amount for the infants at delivery increased only slightly from $3,274 in 2009 to $3,889 in 2012. Important to the evaluation of P4HB, we found that the percentage of these infant records linking to the vital records is similar in 2009 and 2010 at about 89% but decreased to 82% in 2011. This is likely due to the lack of fetal death records at this time and this will be updated once those files are available. As shown in Table 7 below, we found that the birth weight distribution using claims only is very close to that using the linked vital records for the percentage of very low birth weight at about 2% but differs from the vital records on the percentage low birth weight and hence, on the percentage of normal birth weight.

Table 7 Birth Weight Distribution (2009-2011)

	2009		2010		2011	
	Birth Certificate Weight Category	**Claims Weight Category %**	**Birth Certificate Weight Category**	**Claims Weight Category %**	**Birth Certificate Weight Category**	**Claims Weight Category %**
VLBW	2.0%	2.1%	2.0%	2.0%	1.9%	2.1%
LBW	8.3%	5.4%	8.5%	5.5%	8.2%	5.5%
NORMAL BW	89.7%	92.5%	89.5%	92.5%	89.9%	92.4%

While both sources reflect a very stable percentage of Medicaid eligible VLBW infants, we will treat the vital records as the 'gold standard' when measuring birth weight and work primarily with linked records when completing the final evaluation of P4HB.

Averted Births. As opposed to earlier Section 1115 Family Planning waivers in other states, the P4HB program in Georgia has a budget neutrality requirement that is based on a 'shifting' of the

birth weight distribution such that the total costs to the Medicaid program supported by the federal matching rate is lowered from what it would otherwise be by lowering the percentage of all Medicaid births that are LBW and VLBW. This shifting of the distribution should occur from the increased use of family planning services by those brought into the family planning component of the Demonstration as well as from the management of contraceptive use and health conditions that affect reproductive outcomes among those women in the IPC and Resource Mother only components of the Demonstration which should help lengthen their interpregnancy intervals. Additionally, the treatment of acute and management of chronic conditions of women enrolled in the IPC component should lead to better health of the women, and in turn better birth outcomes, if they become pregnant.

While the count of 'averted' births is therefore not central to the calculation of budget neutrality on a quarterly or annual basis under P4HB, we present in Table 8 below an estimate of the number of births that would have been expected among participants in the family planning only component of the Demonstration. Based on the DCH Planning for Healthy Babies Concept Paper submitted to CMS in the application process, the fertility rate among women 18-44, < 200% FPL and uninsured in the second year of the Demonstration was estimated at 169 per 1,000. If this expected fertility rate is applied to all women enrolled in the family planning and other program components by the end of PYs 1 and 2 (as reported from Georgia's MMIS data shown above), expected births would be 5,814 in Year 2.

Table 8 An Estimate of Averted Births Among P4HB Demonstration Population

Number of 'Expected' Births Among Participants[1]	Number of Deliveries/Live Births in 2012 to Participants[2]	Number of 'Averted' Births
5,814	562	5,252

[1] *Based on fertility rates from the concept paper developed in application process: http://dch.georgia.gov/sites/dch.georgia.gov/files/imported/vgn/images/portal/cit_1210/33/52/156793595PlanningforHealthyBabiesProgram121709Final.pdf*

[2] *Reflects the count of all deliveries of a live born in all three components but includes only those counted based on the methods described earlier in the text. If stillbirth and fetal deaths to women in all three components of the program are counted the total in 2012, would be 664.*

The number of actual births in Year 2 to participants fell far below that at 562. 'Averted' births are then estimated at 5,252 in Year 2 which indicates potential savings to the state from a lower-than-expected birth rate among those enrolled. It is also helpful to compare the P4HB experience to that of other states with family planning waivers. In a study of six study states (Bronstein, Adams and Edwards, 2003)[4], states reported that births to participants in one to two years post the program implementation, ranged from a low of 11% (AR, SC) of the 'expected' number of births to as high as 80% (NM). The 562 births in 2012 among Demonstration participants in Georgia constitute about 10% of the number 'expected' which puts the P4HB program well at the lower end of the other states' experiences.

Budget Neutrality. The budget neutrality requirement for Georgia's P4HB program, as noted, is based on the potential of the Demonstration to 'shift' the birth weight distribution. Specifically, the budget neutrality spreadsheet requires that the total federal costs for all low and very low birth weight babies plus normal birth weight babies born to IPC enrollees in each Demonstration year must be less than the total federal costs for all low and very low birth weight babies in the base year for the P4HB program to be considered budget neutral. These measures will be derived

[4] See Bronstein, J, Adams EK and J Edwards. Evaluation of Medicaid Family Planning Demonstrations. Final Report under CMS Contract # 752-2-415921 completed by CNA Analysis and Solutions, Alexandria, VA, November, 2003.

for calendar years 2009-2011in the same manner as those reported here for 2012 and compared to the 2008 estimates in our budget neutrality worksheet in our upcoming Quarterly Report. We anticipate that these cost data can be better used to gauge whether the Demonstration prevented enough unintended first births and through better management of the health of women with very low birth weight babies, prevented enough repeat births among this group, such that the distribution of all Medicaid births shifted away from the low and very low birth weight categories. However, we cannot attribute such an outcome to the Demonstration until we review the CY2012 data in this way.

Family Planning Service Use

A key goal of the P4HB program is to increase access to family planning services for women in the income range targeted. In Georgia, the targeted income range was largely uninsured women > 25% FPL but < 200% FPL. In the absence of P4HB, women in this income range could access family planning services free or on a sliding scale basis, at Title X clinics throughout the state. In Georgia, these clinics are largely public health departments and all of them are included in one or more of the Medicaid CMO networks. In order for the P4HB program to increase overall access and use of services, we need to observe that newly funded Medicaid services do not 'displace' services otherwise available and used at Title X clinics.

Title X Analysis. As part of the evaluation, the team assembled data by quarter, on all visits to the Title X clinics in the state over the pre and post P4HB time periods shown in Table 9 below.

Table 9 Quarterly Data 2009- 1st Quarter 2013 on Percentage of Uninsured Women in the Income Range Targeted by P4HB Using Any Birth Control and Type by WHO Tiers

Use Rates of Family Planning Services at Title X Clinics from Q1 2009 to Q1 2013																	
	Data are for Pre P4HB Quarters								Data are for Post P4HB Quarters								
Qtr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
BC After Visit - Any (N=464,645)																	
% Any Method	96.2	96.2	96.4	96.0	95.0	95.1	95.0	94.8	94.8	94.6	94.4	93.5	93.9	94.3	97.3	97.3	97.4
BC After Visit - Any - Not Using at Entry (N=50,512)																	
% Any Method	64.8	63.7	64.9	63.0	59.0	60.1	58.9	57.9	59.5	58.0	57.8	51.6	54.3	54.2	72.8	73.7	74.3
% No Method	35.2	36.3	35.1	37.0	41.1	40.0	41.1	42.1	40.5	42.0	42.2	48.4	45.7	45.8	27.2	26.3	25.7
BC After Visit - WHO Tiers - Using at Entry (N=414,133)																	
% Tier 1 (High Effect)	9.7	9.9	8.7	8.1	9.2	9.6	9.2	8.5	9.0	9.7	9.9	9.5	10.1	9.9	10.1	9.4	10.2
% Tier 2 (Med Effect)	78.9	78.5	80.8	81.5	78.3	78.3	78.7	80.1	79.2	78.1	77.3	78.6	77.4	77.8	78.6	80.0	78.2
% Tier 3 (Low Effect)	11.0	11.3	10.1	10.0	12.1	11.8	11.8	11.0	11.4	11.8	12.2	11.5	12.1	12.0	11.0	10.1	11.3
% No Method	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.5	0.4
BC After Visit - LARC - Using at Entry (N=414,133)																	
% LARC	5.2	5.3	4.6	4.7	5.3	5.5	5.5	5.1	5.8	6.5	6.8	6.5	7.2	7.2	7.7	7.4	8.4
% Non-LARC	94.4	94.4	95.0	95.0	94.3	94.2	94.1	94.5	93.8	93.0	92.7	93.1	92.4	92.4	91.9	92.1	91.3
Notes: Income =>25% and <200%, Insurance=Uninsured, Visits Included=ALL																	

***N**otes: WHO Tiers of contraceptive effectiveness:*

Tier 1 (High effectiveness): implants, intrauterine devices, sterilization
Tier 2 (Medium effectiveness): injectable methods, patch, pills, and vaginal ring
Tier 3 and 4 (Low effectiveness): condoms, diaphragms, fertility awareness methods, spermicides
Long-acting reversible contraceptive methods (LARC) are a subset of Tier 1 methods that are reversible and include implants and intrauterine devices.

As the descriptive data in Table 9 indicate:

- Across all visits, the percent using any method after their visit is higher in the latter quarters of 2012 and the first quarter of 2013, at 97.4%, than all of the preceding quarters of the pre and post P4HB period shown in the data;

- There was also an increase in those visits where the woman entered as a non-user (those using no method) and left as a user of any method, but here too, the gains appear to be focused in the latter quarters of 2012 and first quarter of 2013 when the percentage of non-users at entry leaving with any method began to exceed 72%; and

- Among those who were using a method of contraception before their visit, there is only slight indication of moving toward more effective methods (i.e., moving from a WHO Tier 3 or 4 to a Tier 1 or 2) but a strong indication of moving toward long-acting reversible contraceptive methods, or LARCs (a subset of Tier 1 methods that are reversible). At the beginning of 2009 only 5.2% of the visits were for women using LARCs upon entry; in the last two quarters of 2012, this percentage exceeded 7% and in the first quarter of 2013, equaled over 8%.

While these patterns indicate increased use, they could also be a reflection of seasonal patterns and/or changes in the composition (age, race/ethnicity) of women seeking services at Title X clinics over this time period. To further test for effects of P4HB, we used regression analysis, as summarized in Table 10, to control for women's characteristics. We tested for significant differences in the changes across the 17 quarters of data in the: 1) the probability more women reported Medicaid coverage; and 2) birth control use by type of method among women in the income range targeted (> 25% FPL and < 200% FPL) as the program matured. We controlled for Age, Race, Ethnicity, English Proficiency, Family Size, Marital Status, Education Level, and Urban/Rural Status. The results are shown below in Table 10; if the P-value is < .05, this indicates a significant change across the 17 quarters.

Table 10 Changes in Insurance and Contraceptive Use at Title X Clinics among Women Targeted by P4HB

		Quarterly Trends >25%, < 200% FPL[1]		Quarterly Trends >50%, <200% FPL[2]	
Test	**Dependent Variable**	**ME**	**P-value**	**ME**	**P-value**
Mprobit	Client Insurance Status				
	Private No FP vs. Uninsured	0.0042	0.047	0.0038	0.088
	Public or Medicaid vs. Uninsured	-0.0009	0.083	-0.0009	0.116
Probit	Birth Control After Visit				
	Any Method vs. No Method	0.0051	<0.001	0.0049	0.001
Probit	Birth Control After Visit Among Those Not Using at Entry				
	Any Method vs. No Method	0.0158	<0.001	0.0153	<0.001
Mprobit	Birth Control Type After Visit -Among Those Using At Entry				
	Tier 1 (High Effect) vs. Tier 3/4 (Low Effect)	-0.0050	<0.001	-0.0043	<0.001
	Tier 2 (Medium Effect vs. Tier 3/4 (Low Effect)	0.0105	<0.001	0.0096	<0.001
Probit	LARC After Visit- Among Those Using at Entry				
	LARC vs. Non LARC	0.0014	<0.001	0.0015	0.001

[1]Includes those between 25% and 200% FPL (N=163,021), [2]Includes those between 50% and 200% FPL (N=124,543)

Insurance: *Excludes those with Private-FP Coverage, Private-UK FP Coverage and Unknown Insurance*

Controlling For: *Age, Race, Ethnicity, English Proficiency, Family Size, Marital Status, Education Level, Urban/Rural Status*

Sample: *Includes only the last or most recent visit for each woman in the dataset*

Quarters: *Q1-Q17 are being treating as a continuous variable in the model to capture time trends*

WHO Tiers of contraceptive effectiveness: *Tier 1 (High effectiveness): implants, intrauterine devices, sterilization*
Tier 2 (Medium effectiveness): injectable methods, patch, pills, and vaginal ring
Tier 3 and 4 (Low effectiveness): condoms, diaphragms, fertility awareness methods, spermicides
Long-acting reversible contraceptive methods (LARC) are a subset of Tier 1 methods that are reversible and include implants and intrauterine devices

Data from this analysis show the following statistically significant ($p < .05$) changes over the quarters:

- There was a small increase in the number of Title X clients covered by private insurance that did not carry family planning coverage vs. being uninsured. In comparison, there was no significant change in the number of women reporting Medicaid vs. uninsured.
- There was a small increase in the probability of using any method vs. no method after the visit among all women at these clinics and a significant increase in the probability (1.53-1.58 percentage points) of using any method among those entering as non-users.
- There was an increase in the use of medium vs. low effect birth control methods with a corresponding decrease in high vs. low effect birth control. Among the high effect methods, there was a small increase in the use of LARCs vs. non-LARC methods.

We repeated this type of analysis using just a Pre/Post P4HB time indicator and found that only the movement toward LARC usage remained statistically significant. We also used women with household incomes < 25% FPL as a comparison group for those made newly eligible under P4HB and again, the only significant finding that remained was the increase in the use of LARCs vs. non-LARC methods. We will follow up with more analysis of this type as more quarters of Title X data become available and explore methods for better defining the treatment and control groups.

Title X and Medicaid Analysis. While Title X providers are central to providing access to the women in the income range affected by the Demonstration, we need to examine the effects of the P4HB program on the use of family planning services through Title X, Medicaid and in the two programs together. To do this we combined the visit data from the Medicaid claims with the non-Medicaid paid visits funded by Title X. The data in Table 11 shows the changes over the pre/post P4HB period in the percent of Medicaid enrolled women ages 18-44 receiving any

family planning visit and in turn, the percent for which the visit/service (drug claims are included) was for some form of birth control.

As more of the Medicaid enrolled women are in the P4HB program we would anticipate these use rates to increase. The percentage of Medicaid women with any family planning visits increased from about 36% in 2010 to almost 40% in 2011 and remained close to that in 2012. The number of visits per enrolled woman was higher in 2012 than in 2009 but there was not a consistent upward trend in this or in the percentage with a visit/service for birth control. In the next bank of data in Table 11, we see that visits paid by Title X for non-Medicaid enrolled women ages 18-44, as a percentage of all women < 200% FPL in Georgia, followed a downward trend over the pre/post period while visits per woman increased only slightly. When the visits paid through Medicaid are added to those paid through Title X (omitting those Medicaid paid) visits, the percentage of women < 200% FPL in Georgia with a family planning visit in either program declined over this time period. Hence, the growth in family planning visits within Medicaid was not sufficient when accompanied by insufficient growth in Title X family planning visits, to lead to an increasing percentage of use in the overall population of women with household incomes < 200% FPL in Georgia.

Table 11 Use of Family Planning and Birth Control Visits among Medicaid Enrolled, Title X Non-Medicaid Enrolled and Combined Usage, 2009-2012

	Use Among Medicaid Women Ages 18-44/All Medicaid Enrolled			**Use At Title X Clinics among non-Medicaid Enrolled Women Ages 18-44/All Women < 200%FPL**			**Total Use (Title X Non Medicaid Plus Medicaid)/All Women < 200% FPL**	
	Any Family Planning Visit[1]	Mean Visits Per Woman	Any Visit /Service for Birth Control[1]	Any Family Planning Visit[2]	Mean Visits Per Woman	Any Visit /Service for Birth Control[2]	Any Family Planning Visit[3]	Any Visit /Service for Birth Control[3]
2009	35.2%	2.19	11.6%	14.1%	2.13	12.9%	35.6%	20.0%
2010	35.8%	2.42	10.8%	14.4%	2.10	13.1%	35.5%	19.5%
2011	39.9%	2.66	11.6%	13.6%	2.13	12.4%	34.0%	18.3%
2012	39.0%	2.44	11.4%	12.2%	2.17	11.2%	32.7%	17.2%

[1] Denominator is all women ages 18-44 enrolled in Medicaid during year. [2] Denominator is all women ages 18-44, citizen, and < 200% FPL in Georgia during year. [3] Denominator is all women ages 18-44, citizen, and < 200% FPL in Georgia during year; numerator is sum of use among Medicaid enrolled women and Title X non-Medicaid enrolled women ages 18-44.

Another way the system could affect the rates of unintended pregnancies and births is to move those women using some form of birth control toward the use of more effective methods. In Table 12 below, we show the composition of the birth control methods used with the Medicaid enrolled and the Title X, non-Medicaid enrolled user groups.

Table 12 Composition of Contraceptive Use among Users in Medicaid and Title X Non-Medicaid Groups, 2009-2012

	Composition of Medicaid Birth Control Methods Used				**Composition of Title X (Non-Medicaid) Birth Control Methods Used**			
	Tier 1	Tier 2	Tier 3/4	LARC	Tier 1	Tier 2	Tier 3/4	LARC
2009	54.4%	42.3%	3.3%	38.4%	11.3%	71.8%	16.9%	5.8%
2010	51.9%	45.0%	3.0%	33.4%	11.2%	71.9%	16.9%	6.5%
2011	55.3%	41.6%	3.1%	36.4%	11.8%	70.8%	17.4%	8.0%
2012	55.5%	41.0%	3.5%	38.5%	11.9%	71.2%	16.9%	9.0%

N*otes: WHO Tiers of contraceptive effectiveness:*

Tier 1 (High effectiveness): implants, intrauterine devices, sterilization
Tier 2 (Medium effectiveness): injectable methods, patch, pills, and vaginal ring
Tier 3 and 4 (Low effectiveness): condoms, diaphragms, fertility awareness methods, spermicides
Long-acting reversible contraceptive methods (LARC) are a subset of Tier 1 methods that are reversible and include implants and intrauterine devices.

These data indicate a stable composition of usage across the four WHO tiers within both the Medicaid and Title X, non-Medicaid enrolled groups. With respect to use of LARC methods, there was a decline among Medicaid enrolled women between 2009-2010 that was reversed after the P4HB program was implemented leaving the percentage of all users in Medicaid at 38.5% in 2012. Use of LARCs at Title X clinics steadily increased from about 6% in 2009 to 9.0% of all users in 2012. The increased use of LARC methods, especially near the end of PY2, may mean that the effects of the P4HB program on reductions in unintended pregnancies and births will be even more evident in the coming years.

Finally, in Table 13 below we show the same patterns of usage among the P4HB enrollees with the required three months of continuous enrollment; here we have combined women in all components (FP only, IPC and RM) of the Demonstration but provided separate data for those auto-enrolled versus not.

Table 13 Use of Family Planning and Birth Control among P4HB Demonstration (FP only, IPC, and RM) Participants, Auto-enrolled and Not Auto-Enrolled, 2011-2012

Year		Use Among P4HB Women Ages 18-44			Composition of P4HB Birth Control Methods Used			
		Any Family Planning Visit[1]	Mean Visits Per Woman	Any Visit /Service for Birth Control[1]	Tier 1	Tier 2	Tier 3/4	LARC
2011	Overall	30.1%	0.67	9.0%	43.0%	46.3%	10.7%	37.1%
	Auto-enrolled	*	*	*	*	*	*	*
	Not Auto-Enrolled	30.4%	0.66	9.1%	43.0%	46.3%	10.7%	37.1%
2012	Overall	29.8%	0.75	8.6%	39.3%	49.1%	11.6%	35.1%
	Auto-enrolled	20.2%	0.44	5.4%	27.6%	59.1%	13.2%	26.6%
	Not Auto-Enrolled	44.8%	1.23	13.5%	46.6%	42.9%	10.5%	40.5%

[1]*Denominator is all women enrolled in aid category codes 180-183 at least three months of continuous enrollment. *<5 family planning visits were found in the data for these women in 2011.*

Overall, we see the percentage of participants in the P4HB program who had any family planning visit remained stable at 30.1% in 2011 and 29.8% in 2012. The overall percentage with

a visit/service for birth control remained low at almost ~9% in 2011 and 2012. There is a marked difference, however, in the utilization patterns for those auto and not auto-enrolled. Whereas 20.2% of those auto-enrolled had any family planning visit in 2012 and 5.4% had a visit/service for birth control, the corresponding percentages for those not auto-enrolled into P4HB were 44.8% with a family planning visit and 13.5% with a visit/service for birth control. Overall, from 35 - 37% of P4HB enrollees using a birth control method were using LARCs in 2011 and 2012. In 2012 this percentage was higher among those not auto-enrolled at 40.5% compared to approximately 27% among those auto-enrolled.

VII. Births and Birth Outcomes among Waiver Participants

In the following table we report on the number of deliveries inclusive of liveborn infants, still births and fetal deaths, in 2012 observed among Demonstration participants enrolled sometime in 2012; we also present counts of pregnancies for the women enrolled in PY2 through the first six months of 2013 as these claims data were available and are indicative of outcomes for women enrolled during the second year of the Demonstration and likely to be paid by the Georgia Medicaid program. We again present data separately for the auto-enrolled and not auto-enrolled women.

It is important to again note that classification of deliveries/births occurring before or after enrollment in P4HB based upon claims data, from which accurate gestational dating of any pregnancy is not possible, could be subject to misclassification, particularly of those pregnancies that end at an early gestational age. In counting pregnancies among Demonstration participants

for presentation in Table 14 below, we again use pregnancy codes as well as an RSM aid eligibility codes as evidence of a new pregnancy among Demonstration participants. We also note that the denominators for the percentage with a pregnancy or delivery in Table 14 include any woman who met our requirements (three plus months of continuous enrollment, no pregnancy during that time, no live birth, stillbirth, or fetal death within 245 days of enrollment) and enrolled in the family planning or IPC components sometime during 2011 and 2012.

Table 14 Pregnancies and Deliveries to Unique P4HB Participants after their Enrollment in 2011 or 2012 by Auto-Enrollment Status

Demonstration Participants[1]	**Number, % with Pregnancy after Enrollment in the Demonstration[1]**	**Number, % with Delivery in 2012 after Enrollment in the Demonstration[1]**
Family Planning Only Enrollees N = 43,428	2,860 (6.6%)	662 (1.5%)
IPC Enrollees N = 123	9 (7.3%)	2 (1.6%)
Auto-Enrolled Demonstration Participants		
Family Planning Only Enrollees N =26,277	1,605 (6.1%)	178 (0.7%)
IPC Enrollees N = 78	6 (7.7%)	0
Not Auto-Enrolled		
Family Planning Only Enrollees N =17,151	1,255 (7.3%)	484 (2.8%)
IPC Enrollees N = 45	3 (6.7%)	2 (4.4%)

[1] *FP Only and IPC enrollment must start with at least 3 consecutive months to be included in this denominator. See earlier notes on methods used to count deliveries/births.*

As the data in Table 14 indicate, the percentage of FP only enrollees with at least three months of consecutive enrollment that had evidence of a pregnancy after enrollment was 6.6% with the not auto-enrolled slightly higher (7.3%) then the auto-enrolled (6.1%). There is also a higher percentage of the not auto-enrolled group with a delivery in 2012. The number of deliveries to these women equaled 484 or 2.8% of those not auto-enrolled while the 178 deliveries to the auto-enrolled equaled only 0.7%.

While the number of total IPC enrollees is small, the data indicate 7.3% experienced a repeat pregnancy after enrollment and this was higher among the auto-enrolled versus not auto-enrolled. As noted earlier, two IPC participants experienced a repeat delivery. Both of these deliveries were among those women not auto-enrolled in the IPC component of P4HB.

Participants vs. Non-Participants

While we do observe births to FP only participants, their fertility rate is lower than the 'expected' number from calculations in our Planning for Healthy Babies Concept Paper and indeed, may have been planned pregnancies and births with good outcomes. Since the P4HB participants who become pregnant are already enrolled in a Medicaid program they may detect their pregnancy earlier and gain access to timely and adequate prenatal care whereas RSM women likely come into Medicaid from an uninsured status. One way to examine this possibility is to compare the birth outcomes of the Demonstration participants to other women with Medicaid paid births (RSM) during the same time period.

In Table 15 below, we compare outcomes for Demonstration participants to RSM women with Medicaid paid live births during the same period and who were not enrolled in the P4HB program at any time. All classifications of outcomes (live birth, birth weight) are derived as in Table 3 and based on those delivery records that can be matched to an infant. We note that only 528 of the total 561 deliveries with live births to FP only participants matched to infants in the claims data.

Table 15 Infant Counts and Costs for Mother and Infant at the Delivery Hospitalization in 2011/2012, Waiver Demonstration Participants and Non-Participants

MEASURE	Counts and Percentage	Average $ Paid Mother	Total $ Paid Infant Delivery Hospitalization	Average $ Paid Infant Delivery Hospitalization
Family Planning Only Participants	528	$5,381	$1,828,328	$3,462
VLBW	11 (2.1%)	$5,438	$811,817	$73,802
LBW	24(4.5%)	$5,921	$177,898	$7,412
Normal BW	493(93.4%)	$5,354	$838,613	$1,701
Non- Participants in Family Planning Only	50,841	$5,235	$168,285,387	$3,310
VLBW	726(1.4%)	$6,357	$53,442,904	$73,613
LBW	2,794(5.5%)	$5,804	$31,147,547	$11,148
Normal BW	47,321(93.1%)	$5,188	$83,694,935	$1,769

The distribution of birth weight for the FP only participants is different from that of non-participants but in an unexpected direction. Whereas non-participants exhibit a rate of VLBW of 1.4% that is lower than the state's average of ~2.0%, those participating in the FP only component of P4HB exhibit a higher percentage of infants with VLBW at 2.1%. The percentage of LBW infants among women in the Family Planning Only P4HB program, however, is lower at 4.5% compared to non-participants at 5.5%. The higher percentage of VLBW infants among P4HB participants may reflect a selection of women into P4HB who were at higher risk of poor birth outcomes. Under this assumption we would expect their expenses to be higher and on average they are for infants ($3,462 compared to $3,310). On the other hand both mother and infant costs at delivery are generally lower for women in the FP only component of the Demonstration than other RSM women and infants within the LBW category.

Since there are differences in the characteristics of mothers in these two groups that affect birth outcomes, we estimated the probability of LBW and VLBW outcomes among these two groups, controlling for age, race/ethnicity, poverty level of county of residence and months enrolled in

Medicaid since January 2011. We also controlled for auto-enrollment. In preliminary results age, race and county poverty levels were all significant explanatory variables; more work will be done to explain these patterns as participants can be observed over longer periods and more control variables (e.g. smoking) can be brought into the analysis from vital records; vital records will also provide the most accurate measure of birth weight category.

We can also make a comparison of the IPC P4HB participants to other women in Medicaid giving birth to a VLBW infant during the same time period. In Table 16 below we present data on the number and percentage with a repeat pregnancy within 6 or 12 months and in turn, a repeat delivery within 12 months. We also report on the outcomes of the deliveries resulting in a live birth.

Table 16 Number and Percent of Women with VLBW Infant with Repeat Pregnancy and Deliveries within Six or Twelve Months, IPC Waiver Demonstration Participants and Non-Participants

	N	Pregnant within 6 months	Pregnant within 12 months	Delivery within 12 months	Delivery Outcome	Birth Weight
RSM random sample[1]	220	16 (7.3%)	30 (13.6%)	2 (0.9%)	Live Birth	1 VLBW, 1 NBW
IPC Group[2,3]	123	7 (5.7%)	9 (7.3%)	1 (0.8%)	Live Birth	NBW

[1]*Within 6 months or 12 months after Delivery in RSM plus 60 days.*
[2]*Within 6 months or 12 Months after Enrollment Start Date in IPC Component of Waiver using methods to identify deliveries/births as described for Table 2.*
[3]*The stillbirth to the IPC participant shown in Table 2 occurred after 12 months of enrollment*

These data indicate that IPC women had lower repeat pregnancies within six months (5.7% vs. 7.3%) of enrollment in IPC than the women in a random sample of RSM mothers within six months of losing their Medicaid coverage. When a 12 month window is used IPC women again had lower rates of repeat pregnancies (7.3% vs. 13.6%) than the RSM (non-IPC) comparison group. Important to the goals of the P4HB program, the live birth to the IPC participant was

normal birth weight; however, for the repeat births to the RSM (non-IPC) comparison group, one was normal birth weight and one was very low birth weight.

Pre/Post Analysis of RSM Women

With two years of data post the implementation of the Demonstration, we can now look at some measures for two years pre and two years post, the program's implementation. One outcome that could be affected by the P4HB program is the number of repeat pregnancies and deliveries among women with an 'index' delivery/birth paid by Medicaid (RSM) as more of these women are enrolled in P4HB after a birth on Medicaid. In Table 17, we provide data on the percentage of RSM women who have a pregnancy/birth within six months and twelve months of the index birth that was paid by Medicaid. Births will be understated due to the lack of full run out of claims in 2013 and as noted earlier, we know that deliveries in 2012 are understated due apparently, to incomplete claims in the currently available extract of claims.

Table 17 Percent of RSM Women with a Repeat Pregnancy/Birth Paid by Medicaid within Six/Twelve Months Pre and Post the Demonstration

	Number and Percent of RSM Delivering Mothers with Pregnancy within 6 Months	Number and Percent of RSM Delivering Mothers with Pregnancy within 12 Months	Number and Percent of RSM Delivering Mothers with Delivery within 12 Months
Pre P4HB			
2009	2,812 3.7%	8,830 11.6%	2,889 3.8%
2010	2,351 3.2%	7,772 10. 6%	2,316 3.2%
Post P4HB			
2011	2,635 3.7%	8,131 11.5 %	2,663 3.8%
2012	2,332 3.4%	Not enough claims run-out	Not enough claims run-out

As the data in Table 17 indicate, the percentage of RSM women with a repeat pregnancy within six months ranges from 3.2% to 3.7% during both the pre and post periods although slightly lower in 2012 (at 3.4%) than 2009. Longer run out of claims data will help us assess whether the

percentages with repeat pregnancies and/or deliveries within the next 12 months changes in 2012 and multivariate analysis will help us assess whether these patterns are indicative of an effect of the P4HB program itself. We will also complete sensitivity analysis by treating the first six months of 2011 as being in the 'pre' period due to the slow roll out and take-up of P4HB benefits.

VIII. CONCLUSIONS AND RECOMMENDATIONS

The innovative P4HB program was implemented in the state of Georgia on January 1, 2011 with extensive efforts at both the DCH and local levels to market the benefits of this Demonstration. While the DCH used all available resources to make women and providers aware of the program across both the urban and rural areas of the state, the numbers expected to enroll in either the first or second year did not meet the expectation that half of those eligible would enroll. As shown in the data presented in this report, the percent enrolling in the FP component by the end of the second year of the Demonstration was 12%, far lower than expectations and most other states' experiences. However, we do find that the use of family planning services among Medicaid enrolled women has increased over the 2009-2012 pre/post period and that those using some form of contraceptives from visits to Title X clinics and/or other Medicaid paid providers have shifted toward the use of highly effective, LARC contraceptive methods. This is important for the success of the program.

By the third quarter of 2011, DCH recognized the need to undertake efforts to increase enrollment and during the fourth quarter of CY2011 initiated auto-enrollment of all RSM women

whose Medicaid coverage was ending post-delivery as well as young women aging out of PeachCare for Kids® into the P4HB program. The effect of this effort was reflected in the sharp increase in enrollment at the beginning of CY 2012 and these increases did continue into CY 2012. As noted, declines were seen toward the end of CY 2012 and it may be that when it was time for recertification, these women did not follow through with this process. As noted in this report, we found lower usage rates among those women auto-enrolled versus not auto-enrolled. Given the large numbers of auto-enrolled women, it is still important for the CMOs to ensure that the women who are auto-enrolled fully understand the benefits to which they are entitled and that these services will still be available to them if they recertify their eligibility and remain enrolled.

Recommendations

Given the growing number of uninsured women < 200% FPL in Georgia over our study period as seen in the data presented here, it is important for the state to consider an extension of the P4HB program beyond the scheduled end date of December 2013, in order to provide women in this income range a safety net for access to preventive and family planning services. Given the evidence that enrollment and service use in P4HB has increased; the Title X and Medicaid provider systems appear to be moving more women toward use of LARC methods; births to participants are lower than expected and savings are evident; and the program succeeded in preventing repeat VLBW births among the IPC enrollees, it appears the P4HB program is on track to move further toward its stated goals and objectives. Specific recommendations in this regard are:

1. The patterns seen near the end of this second year indicate the program may be reaching maturity in terms of sustainable levels of enrollment, use of effective family planning methods and management of women with VLBW infants. It is important for the state to strengthen these trends.
2. Continue to work with Title X as an active partner in the enrollment of eligible women into the P4HB program and as a provider of family planning services to uninsured and under insured women who, if pregnant, are eligible for Medicaid coverage. A continued monitoring of the Title X quarterly data will inform DCH about the trends seen in the most recent quarters that indicate increased use of birth control methods and in turn, more use of LARCs. An added benefit of such a partnership is that these efforts can help Title X clinics 'leverage' Medicaid funds to increase revenues and allow for use of Title X funding to further expand outreach, access and provision of more effective methods of birth control.
3. Evaluate the continued role of auto-enrollment as a means of increasing participation in the P4HB program.
4. Work diligently to retain and enhance service utilization for those women who were auto-enrolled in the P4HB program through increased mailings, CMO outreach and dissemination of information regarding the ease of re-enrollment and the wide array of preventive and family planning services available to enrollees at no cost. In this process, continue to outreach and train providers to assess and help women develop and achieve a reproductive health plan while they are enrolled.
5. Continue working with the IPC enrollees to assure their use of all available services and in particular the management of chronic conditions in addition to the family planning

services intended to help them prevent a repeat pregnancy or birth within a short time period.

6. Renew the marketing campaign for P4HB to target: media outlets (TV, radio) as well as social media (texts, Face Book, Twitter) and; eligible FP only enrollees as well as eligible IPC enrollees. Increase the placement of advertising materials on radio stations and printed materials in human service and public transportation venues. Materials could include pamphlets and brochures to reach eligible but not yet enrolled women.
7. To help enrolled women understand the benefits of the program, as well as to educate women not yet enrolled about the preventive nature of the program, DCH might consider including a list of the covered services for each component of the program. Podcasts and videos on the DCH website are also options. In addition, listing the specific services on the back of the "Pink" and "Purple" cards which are sent to women once they are enrolled may help both enrolled women and their providers better understand the services they are eligible to receive. Education programs could also be completed with videos in the clinic setting. The large number of women coming into P4HB already pregnant indicates the preventive nature of the program is not well understood.
8. A provider component of this renewed marketing campaign might target a broad range of provider types (OBGYN, family physicians, nurse practitioners, Title X women's health coordinators, neonatal ICU providers and social workers). This renewed marketing campaign should include clear information about eligibility, enrollment, and program benefits.

9. Explore opportunities to decrease the time between the eligibility determination and actual CMO enrollment for P4HB. While most women who eventually come into a CMO for P4HB services do so within two months from the date of the eligibility determination, this is a time period when women do not have access to P4HB services so unintended pregnancies may occur. There were 1,043 pregnancies observed among women enrolled less than the three months required for inclusion in the full analysis. These can perhaps be seen as failures of women to understand the program and/or failure of the delivery system to get the women in for family planning counseling and services in a timely fashion.

Appendix A: P4HB Communication Plan

Communication Plan (Revised for Year 2)

Phase	Activities	Status
Phase 1: Educate Providers and CMOs Focuses on educating health care providers and CMOs about P4HB. These are the major stakeholders identified through the Communication Plan as having "the most potential to positively influence and impact the behaviors of patients through preventative care measures."	1) Introducing a revised P4HB Communication Plan to the Work Group and the CMOs; 2) Develop a page on the DCH website for the P4HB program that provides specific information about the program, benefits, provider network, client eligibility and enrollment and program application; and 3) Introduce the P4HB program and program-related materials to the CMOs (including program logo, poster and postcards). 4) Added CMOs' handbooks to the DCH P4HB website. 5) Update DCH P4HB website to include additional program information.	1) through 3). Completed initial education. Re-education is ongoing. Web page developed and updated as needed. CMOs utilizing program-related materials. Handbooks (#4) added to P4HB website in June 2012. P4HB website updated in June 2012 (#5).
Phase 2: Leverage the Strengths & Assets of Partners Purpose is to use local experts to champion LBW prevention by encouraging eligible women in their respective communities to enroll in the P4HB program	The Improving Birth Outcomes Work Group will identify local experts at the district level. Additional organizations and providers also identified as potential collaborators, including MCH staff, WIC staff, family practice providers, pediatricians, faith community leaders, nursing and medical schools, nurse midwives, health care professionals, OBGYNs, policymakers, media representatives, civic and cultural leaders, and tobacco program coordinators.	Ongoing meetings with the Improving Birth Outcomes Work Group now held bi-monthly. Communication is ongoing with providers, MCH staff, pediatricians and public health staff. Outreach occurring via the RSM Outreach Project staff
Phase 3: Implement Consumer-Based Outreach (Statewide and Locally) Purpose is to inform consumers and providers about P4HB using media, messaging, and an organized set of communication activities	1) Introduce campaign to 18 public health districts 2) Outline marketing proposal and estimated costs 3) Determine overall budget and process in which marketing materials will be purchased 4) Buy billboards, radio and print ads. Advertisement will occur in 2	1) through 12). Completed. The RSM Outreach Project staff from the Department of Family and Children Services has been instrumental in our "grassroots" outreach efforts within the 18 public health districts.

Phase	Activities	Status
	phases over the course of the program, and counties with highest LBW rates will be targeted first for billboard ads. 5) Finalize copy for poster/postcard design 6) Replace postcard with brochure in summer 2011. 7) Obtain approval of printing cost for brochures, posters/postcards; obtain shipping addresses 8) Provide RSM, PH departments, and DFCS officials with notice that postcards/posters and brochures will be distributed and guidance about how to use them. 9) Draft/distribute press release announcing launch of P4HB program. 10) Pitch background sessions to identified reporters from the Atlanta Journal & Constitution. 11) Begin brainstorming a newsworthy event for Summer 2011 12) Other activities: theater ads, health fairs, participating in cause-related charitable events, articles in provider organization newsletters; news releases, media advisories, op-eds, podcast messages placed on PH4B website, Face Book and Twitter pages. In addition, the Plan calls for media advisories, op-eds and conducting "background sessions" with area reporters to discuss the state's efforts to reduce its LBW rate.	

Phase	Activities	Status
Phase 4: Use Existing Resources for Support and Coaching Goal is to use current available resources in Georgia to promote prenatal care, healthy lifestyles before and during pregnancy, and smoking cessation.	Reach out to WIC staff and Georgia Quit Line team and inform them of P4HB and that P4HB will reference them on the P4HB website and possible future marketing materials.	Completed.
Phase 5: Annual Campaign Evaluation To analyze on an annual basis the strengths and weakness of the P4HB program. Four types of evaluation are suggested: 1) formative; 2) process; 3) outcome: and 4) Impact	1) Assess the strengths and weaknesses of campaign materials and strategies 2) Measure effort and the direct outputs of campaign 3) Examine the campaign's implementation and how the activities involved are working 4) Measure effect and changes that result from the campaign. (Assess outcomes in the target populations or communities that come about as a result of the campaign's strategies and activities; measure policy changes.) 5) Measure community-level changes that are achieved as a result of the campaign's aggregate effects on individuals' behavior and the behavior's sustainability. Attempts to determine whether the campaign caused the effects. 6) Make recommendations for Year 2 of the campaign based on data gained from the annual evaluation; implement necessary changes in Year 2	Ongoing. Emory University is assisting with the evaluation.

Appendix B: Member and Provider Survey Results

CMO Member Survey Results

Enrollment and Utilization of Services in P4HB

	First Wave N = 169 Responses n (%)	Second Wave N = 396 Responses n (%)	Third Wave N = 1151 Responses n (%)
Enrollment in P4HB to get…			
Birth control or family planning services	122 (72%)	224 (57%)	542 (47%)
Pregnancy testing	46 (28%)	100 (25%)	289 (25%)
Testing or treatment for sexually-transmitted infections	56 (33%)	118 (30%)	297 (26%)
Primary care (such as routine check-up, care for an illness)	135 (80%)	270 (68%)	616 (54%)
Other	18 (11%)	36 (9%)	91 (8%)
Have used these P4HB services…			
Birth control or family planning services	83 (49%)	154 (39%)	471 (41%)
Pregnancy testing	34 (20%)	62 (16%)	205 (18%)
Testing or treatment for sexually-transmitted infections	56 (33%)	90 (23%)	218 (19%)
Primary care (such as routine check-up, care for an illness)	92 (54%)	154 (39%)	421 (37%)
Other	25 (15%)	11 (3%)	32 (3%)
Before enrolling in P4HB, had trouble getting…			
Birth control or family planning services	85 (50%)	146 (39%)	262 (23%)
Pregnancy testing	57 (34%)	78 (20%)	126 (11%)
Testing or treatment for sexually-transmitted infections	59 (35%)	97 (24%)	133 (12%)
Primary care (such as routine check-up, care for an illness)	107 (63%)	138 (35%)	343 (30%)
Other	19 (11%)	34 (9%)	102 (9%)
Types of problems prior to P4HB:			
I did not have a way to get to appointments	12 (5%)	29 (6%)	Questions not covered on survey
I could not pay for services	74 (34%)	232 (46%)	
I could not pay for birth control method	86 (40%)	135 (27%)	
I could not find a doctor or nurse that would treat me	18 (8%)	37 (7%)	
I could not get time off from work for appointments	2 (1%)	12 (2%)	
I had no one to take care of my children	11 (5%)	16 (3%)	
I was too sick to get to the doctor, nurse or clinic	3 (1.4%)	6 (1%)	
Other	10 (4%)	33 (7%)	
Changes P4HB made for the participant…			
I am going to a different doctor or nurse for family planning services or birth control	60 (36%)	116 (29%)	291 (25%)
I am going to a different doctor or nurse for primary care	46 (27%)	85 (21%)	232 (20%)
I have started using a birth control method	82 (49%)	142 (36%)	429 (37%)
I have changed the birth control method I use	43 (25%)	77 (19%)	221 (19%)
I have more choice of birth control methods	83 (49%)	145 (37%)	498 (43%)
I do not have to use my own money for family planning services or birth control	91 (54%)	185 (47%)	473 (41%)
I am able to get preventive care (such as Pap smears) and family planning counseling	140 (83%)	243 (61%)	605 (53%)
With the Purple Card (IPC), I am able to get care for illnesses	5 (3%)	15 (4%)	33 (3%)
With the Purple Card (IPC), I am able to get medicines for illnesses when I need them	34 (20%)	8 (2%)	29 (3%)
Other	1 (0.6%)	6 (2%)	77 (7%)

Knowledge of Members about P4HB

Knowledge of…	First Wave N = 169 Responses n (%)	Second Wave N = 396 Responses n (%)	Third Wave N = 1151 Responses n (%)
Services available through the "Pink Card"…			
Birth control services and methods	118 (70%)	202 (51%)	446 (39%)
Pap smear and pelvic exam	116 (69%)	219 (55%)	450 (39%)
Tubal Ligation (tubes tied)	11 (7%)	64 (16%)	90 (8%)
Pregnancy testing	37 (22%)	163 (41%)	391 (34%)
Screening for sexually transmitted infections	88 (52%)	152 (38%)	336 (29%)
Follow-up of an abnormal Pap smear	59 (35%)	144 (36%)	359 (31%)
Treatment for sexually transmitted infections	77 (46%)	109 (28%)	271 (24%)
Treatment for major problems related to family planning services	44 (26%)	98 (25%)	217 (19%)
Vitamins with folic acid	44 (26%)	84 (21%)	168 (15%)
Some vaccinations	36 (21%)	73 (18%)	164 (14%)
Non-emergency transportation	4 (8%) of 44*	27 (7%)	93 (8%)
Services available through the "Purple Card"…			
Primary care services (up to 5 visits per year)	9 (5%)	5 (1%)	14 (1%)
Treatment for medical problems like high blood pressure and diabetes	7 (4%)	3 (1%)	7 (1%)
Medicines for medical problems like high blood pressure and diabetes	6 (4%)	3 (1%)	6 (1%)
Care for drug and alcohol abuse (such as rehab programs)	2 (1%)	2 (1%)	5 (0%)
Some dental services	10 (6%)	5 (1%)	6 (1%)
Non-emergency transportation	7 (4%)	2 (1%)	8 (1%)
Nurse case management/Resource Mother	6 (4%)	1 (0%)	10 (1%)
Eligibility for 'Pink Card'			
Be between 18-44 years of age	155 (92%)	295 (74%)	443 (38%)
Be a resident of Georgia	147 (87%)	278 (70%)	451 (39%)
Be a U.S. Citizen	144 (85%)	275 (69%)	456 (40%)
Have a household income that is at or below 200% of the federal poverty level	126 (75%)	224 (57%)	347 (30%)
Not be eligible for Medicaid or the Children's Health Insurance Program (PeachCare for Kids®)	103 (61%)	174 (44%)	290 (25%)
Not otherwise insurer for Family FP Services	27 (55%) out of 49*	139 (49%) out of 281*	270 (23%)
Other	1 (0.6%)	25 (6%)	40 (3%)
Eligibility for 'Purple Card'			
Be between 18-44 years of age	44 (26%)	27 (7%)	27 (2%)
Be a resident of Georgia	42 (25%)	27 (7%)	25 (2%)
Be a U.S. Citizen	40 (24%)	26 (7%)	25 (2%)
Have a household income that is at or below 200% of the federal poverty level	35 (21%)	22 (6%)	22 (2%)
Not be eligible for Medicaid or the Children's Health Insurance Program (CHIP)	27 (16%)	15 (4%)	18 (2%)
Not otherwise insured for health care services	0 (0%) of 49*	4 (1%)	17 (1%)
Delivered a baby weighing < 3 pounds 5 ounces since January 1, 2011	17 (10%)	5 (1%)	9 (1%)
Other	5 (3%)	2 (1%)	1 (0%)

Problems Encountered by Members Enrolled in P4HB

Problems Under P4HB	First Wave N = 169 Responses n (%)	Second Wave N = 396 Responses n (%)	Third Wave N = 1151 Responses n (%)
I cannot get the family planning services I want	38 (22%)	85 (21%)	167 (15%)
I cannot get referrals or follow-up for care I need	31 (18%)	76 (19%)	148 (13%)
I cannot find a doctor or nurse willing to take P4HB clients	30 (18%)	82 (21%)	150 (13%)
I don't want to leave my current doctor or nurse	23 (14%)	59 (15%)	112 (10%)
I have to wait too long to get services	18 (11%)	50 (13%)	115 (10%)
I do not have transportation	19 (11%)	48 (12%)	97 (8%)
I cannot get to the doctor or nurse when they are open	10 (6%)	40 (10%)	83 (7%)
My P4HB doctor or nurse will not prescribe the birth control method I want to use	9 (5%)	29 (7%)	64 (6%)
Other	6 (4%)	12 (3%)	583 (51%)

Ways in Which Members Learned About P4HB

Source of Information	First Wave N = 169 Responses n (%)	Second Wave N = 396 Responses n (%)	Third Wave N = 1151 Responses n (%)
Mailings	45 (22%)	87 (22%)	Question not covered on survey
E-mail	1 (0.5%)	7 (2%)	
CMO websites	2 (1%)	6 (2%)	
CMO telephone calls	4 (2%)	10 (3%)	
Georgia Department of Community Health websites	17 (8%)	23 (6%)	
Georgia Department of Community Health meetings	9 (4%)	8 (2%)	
Doctors, nurses, or other staff at health department or WIC office	57 (28%)	95 (24%)	
Doctors, nurses, or other staff at the hospital	9 (4%)	23 (6%)	
Doctors, nurses, or other staff at my doctor's office	13 (6%)	28 (7%)	
Friends or family members	28 (14%)	69 (17%)	
Postings on billboards and public transportation	5 (2%)	15 (4%)	
Other	13 (6%)	27 (7%)	

Information Needs About P4HB

Type of Information	First Wave N = 169 Responses	Second Wave N = 396 Responses	Third Wave N = 1151 Responses
	Needs More Information n (%)	Needs More Information n (%)	Needs More Information n (%)
Where to go for service	77 (46%)	109 (28%)	244 (21%)
Services available with the Pink Card	108 (64%)	221 (56%)	331 (29%)
Services available with the Purple Card	82 (49%)	127 (32%)	184 (16%)
Cost of services	85 (50%)	190 (48%)	297 (26%)

Areas of P4HB that Were Hard to Understand

Area	First Wave N = 169 Responses	Second Wave N = 396 Responses	Third Wave N = 1151 Responses
	Hard to Understand n (%)	Hard to Understand n (%)	Hard to Understand n (%)
Who can get P4HB	29 (17%)	75 (19%)	92 (8%)
Whether I can get P4HB	37 (22%)	87 (22%)	76 (7%)
Complete the paper work to sign up for P4HB	20 (12%)	58 (15%)	53 (5%)
Complete the web form to sign up for P4HB	18 (11%)	47 (12%)	35 (3%)
Get the required documents to sign up for P4HB	27 (16%)	71 (18%)	63 (5%)
Pick a Care Management Organization (CMO)	41 (24%)	83 (21%)	82 (7%)
Pick a provider	45 (27%)	85 (21%)	95 (8%)
Understand what I can get from P4HB	77 (46%)	156 (39%)	212 (18%)
Other	6 (4%)	16 (4%)	616 (54%)

CMO Provider Survey Results

Provider Understanding of Eligibility Criteria for P4HB

Eligibility Criteria for P4HB	**First Wave** **Correct Responses by Category of P4HB** N = 62		**Second Wave** **Correct Responses by Category of P4HB** N = 104		**Third Wave** **Correct Responses by Category of P4HB** N = 31	
	FP only n (%)	**IPC n (%)**	**FP only n (%)**	**IPC n (%)**	**FP only n (%)**	**IPC n (%)**
Between 18-44 years of age	25 (40%)	17 (27%)	41 (39%)	28 (27%)	14 (45%)	13 (42%)
Resident of Georgia	26 (42%)	20 (32%)	43 (41%)	33 (32%)	15 (48%)	14 (45%)
U.S. Citizen	24 (39%)	18 (29%)	40 (38%)	31 (30%)	13 (42%)	12 (39%)
Household income at or below 200% FPL	19 (31%)	16 (26%)	30 (29%)	25 (24%)	9 (29%)	8 (26%)
Not otherwise eligible for Medicaid or the Children's Health Insurance Program (CHIP- PeachCare for Kids®)	19 (31%)	16 (26%)	31 (30%)	24 (23%)	10 (32%)	10 (32%)
Not otherwise insured for family planning services	16 (26%)	15 (24%)	27 (26%)	22 (21%)	10 (32%)	10 (32%)
Delivered a very low birth weight infant since January 1, 2011	----	15 (24%)	----	22 (21%)	----	8 (26%)
Other	2 (3%)	2 (3%)	2 (2%)	2 (2%)	-----	----

Providers' Knowledge of Services Covered Under their P4HB Contract

Services Covered Under P4HB	**First Wave** **N = 62** **Correct Responses** n (%)	**Second Wave** **N = 104** **Correct Responses** n (%)	**Third Wave** **N = 31** **Correct Responses** n (%)
Family planning initial and follow-up exams	25 (40%)	45 (43%)	17 (55%)
Contraceptive services and methods	27 (44%)	46 (44%)	18 (58%)
Tubal litigation	17 (27%)	31 (30%)	14 (45%)
Pregnancy Testing	21 (34%)	41 (39%)	15 (48%)
Screening for sexually transmitted infections	19 (31%)	33 (32%)	14 (45%)
Follow-up of an abnormal Pap smear, including Colposcopy	14 (23%)	26 (25%)	5 (16%)
Treatment for sexually transmitted infections	18 (29%)	31 (30%)	13 (42%)
Treatment for major complications related to family planning services	10 (16%)	17 (16%)	11 (35%)
Multivitamins with folic acid	16 (26%)	25 (24%)	13 (42%)
Hepatitis B and Tetanus-Diphtheria vaccines	13 (21%)	18 (17%)	8 (26%)
Primary care services (up to 5 outpatient visits per year)	12 (19%)	17 (16%)	7 (23%)
Management and follow-up of chronic diseases	6 (9%)	11 (11%)	2 (6%)
Prescription medications for chronic diseases	5 (8%)	9 (9%)	3 (10%)

Detoxification and outpatient rehabilitation for substance abuse	3 (5%)	5 (5%)	1 (3%)
Limited dental services	4 (6%)	7 (7%)	2 (6%)
Nurse case management and Resource Mother outreach for health and social service coordination and support of health behaviors	10 (16%)	15 (14%)	6 (19%)
Non-emergency transportation	5 (8%)	6 (6%)	5 (16%)

Providers' Perception of Barriers for P4HB Participation

Factor	**First Wave N = 62** **Perceived as Barrier n (%)**	**Second Wave N = 104** **Perceived as Barrier n (%)**	**Third Wave N = 31** **Perceived as Barrier n (%)**
Waiver does not cover the full range of family planning services	16 (26%)	27 (26%)	11 (35%)
Waiver does not cover referrals or follow-up care	17 (27%)	28 (27%)	12 (39%)
Waiver does not cover complications of family planning service	16 (26%)	27 (26%)	8 (26%)
Your practice is full	4 (6%)	8 (8%)	3 (10%)
Other	1 (2%)	2 (2%)	------

Providers' Information Needs

Type of Information	**First Wave N = 62** **Need More Information** n (%)	**Second Wave N = 104** **Need More Information** n (%)	**Third Wave N = 31** **Need More Information** n (%)
Enrollment eligibility criteria	21 (34%)	40 (38%)	20 (65%)
Covered services for those enrolled in the Family Planning component	22 (35%)	44 (42%)	24 (77%)
Covered services for those enrolled in the Inter-pregnancy Care component	23 (37%)	47 (45%)	25 (81%)

Providers' Preference for Receipt of Information

Route of Receiving Information	**First Wave N = 62** **Preferred Route n (%)**	**Second Wave N = 104** **Preferred Route n (%)**	**Third Wave N = 31** **Preferred Route n (%)**
Direct mailings	20 (32%)	29 (28%)	Question not covered on survey
E-mails to your practice	21 (34%)	38 (37%)	
Websites of the CMOs	62 (100%)	9 (9%)	
Telephone calls to your practice	2 (3%)	6 (6%)	
Website of the Georgia Department of Community Health	11 (18%)	17 (16%)	
Meetings hosted by the Georgia Department of Community Health or CMOs	9 (15%)	15 (14%)	
Professional conferences or practice staff meetings	6 (10%)	9 (9%)	
Colleagues	2 (3%)	2 (2%)	
Posting on billboards and public transportation	0 (0%)	0 (0%)	