Alabama Medicaid Agency

Proposed Evaluation Design for the 1115 Plan First Demonstration Waiver

Waiver Period November 27, 2017 through September 30, 2022

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Proposed Evaluation for Plan First, 2018-2022

Introduction

The Evaluation for Plan First during the 2018-2022 reporting period will consist of two parts. Part I will report on the core objectives of the demonstration program, as stated in the renewal application and described below. This section of the report will highlight program outcomes of care for participants enrolled in Plan First (e.g., enrollment, births), quality of care (e.g., use of effective contraception, screened for cervical cancer), and access to care (e.g., geographic differences in service use, provider participation). Following previous evaluations, Part II of the report will provide an overview of trends for select outcome and utilization indicators by summarizing data from the current reporting period and prior years. Finally, our report will include the costs of operating the program.

We will use 8 sources of data for the evaluation. From the Alabama Medicaid Agency information system, we will obtain (1) monthly enrollment data and (2) claims for the Plan First program. We also will obtain (3) delivery claims on a quarterly basis that can be matched to Plan First participants, and (4) the number of Plan First participants who have been referred to the smoking cessation telephone counseling service (Quit Line). We will use (5) the American Community Survey (ACS) to estimate the age, race and geographic distribution of uninsured women who may be eligible for Plan First. Finally, we will conduct (6) a survey of 800 women enrolled in Plan First about their experiences in the program; (7) a survey of 300 women who are no longer enrolled in Plan First to assess their reasons for not re-enrolling; and (8) a survey of 100 men enrolled in Plan First about their experiences obtaining vasectomy services.

PART I: Assessment of reporting-period specific goals

Goal 1. Increase the portion of women eligible for Plan First who enroll, and reduce race/ethnicity and geographic disparities in enrollment.

The program goal is to enroll into Plan First 80% of eligible women between ages 19 and 40 across all racial/ethnic groups and geographic areas.

Hypotheses: We anticipate that the composition of the enrolled population will be demographically similar to the population of eligible participants because of programmatic features designed to reduce barriers to enrollment, such as automatic enrollment following delivery and allowing re-enrollment through Express Lane Eligibility. However, we do not expect the enrolled population to reflect the exact distribution of eligible women because enrollment in the program is voluntary. For example, based on past evaluations of Plan First, we anticipate lower enrollment rates among older women compared to younger women.

Enrollment of income-eligible women is a key metric that documents the impact of the demonstration program on providing coverage. We will report on this outcome using the table templates presented below. Men's enrollment is reported as part of Goal 6, since vasectomy and vasectomy-related care coordination are the only services available to men in Plan First.

Table 1.1. Unduplicated number of female enrollees, by age group and quarter

	19-20*	21-44	45-55	Total enrollment
Quarter 1 (October-December)				
Quarter 2 (January-March)				
Quarter 3 (April-June)				
Quarter 4 (July-September)				

*Women <19 years of age are not eligible for Plan First.

To assess enrollment, we will compare the number of women enrolled in Plan First to estimates of the number of income-eligible women in the American Community Survey, overall and according to age, race/ethnicity and geographic sub-groups. By computing the percentage of potentially eligible women enrolled, we will be able to assess any disparities in enrollment. We will highlight sub-populations where enrollment is less than 80% of the estimated population that is eligible.

Table 1.2. Estimates of low-income women eligible for and enrolled in Plan First, by age, race and public health district.

	ACS Population Estimate	Enrolled in Plan First	% Enrolled
Age, years			
19-24*****			
24-44			
45-54			
Race			
White			
Black			
Hispanic			
Asian/Pacific Islander			
American Indian			
Other race/ethnicity			
Public Health District			
Northern			
Northeastern			
Jefferson			
East Central			
West Central			
Southeastern			
Southwestern			
Mobile			
TOTAL			

*County-level population estimates of low-income women are not available for those 19-20 and 21-24, separately, due to ACS reporting.

We also will examine patterns of re-enrollment in Plan First since this is an important ***process indicator*** that likely contributes to the overall number of eligible women enrolled in the program. We will use consecutive years of enrollment data to assess re-enrollment patterns. We will compute the overall percentage of women enrolled in the prior demonstration year (e.g., DY17) who re-enrolled in Plan First in the reporting period (e.g.,DY18), and assess differences in re-enrollment across sub-groups using chi-squared tests (Table 1.3). We also will estimate the likelihood of re-enrollment after accounting for differences in characteristics of women in the program using multivariable-adjusted logistic regression (Table 1.4).

Table 1.3. Percentage of Plan First participants who re-enrolled in the reporting year

	Enrolled in DY17	% Enrolled in DY18		Re-enrolled in DY18	Did not re-enroll
Age, years					
19-24					
24-44					
45-54					
Race					
White					
Black					
Hispanic					
Asian/Pacific Islander					
American Indian					
Other race/ethnicity					
Service use					
Clinical services					
Non-clinical services only					
Did not use services					
Public Health District					
Northern					
Northeastern					
Jefferson					
East Central					
West Central					
Southeastern					
Southwestern					
Mobile					
TOTAL					

Table 1.4. Characteristics associated with re-enrollment in Plan First

	Odds ratio	(95% CI)	Probability compared to chance
Age, years			
19-24			
24-44			
45-54			
Race			
White			
Black			
Hispanic			
Asian/Pacific Islander			
American Indian			
Other race/ethnicity			
Service use			
Clinical services			
Non-clinical services only			
Did not use services			
Public Health District			
Northern			
Northeastern			
Jefferson			
East Central			
West Central			
Southeastern			
Southwestern			
Mobile			

CI: confidence interval

We also will conduct a telephone survey of 300 women who have been terminated from the Plan First program to better understand women's reasons for not re-enrolling in Plan First and identify potential solutions to reduce barriers to re-enrollment. This sample size is feasible given anticipated changes in women's contact information. The survey will be stratified by age because we expect women's eligibility and reasons for not re-enrolling in the program may be different for younger as compared to older women. We will compute percentages and compare differences by age group using chi-squared tests. With a sample size of 300 women and an estimated 30% of women in all age groups reporting that they were unaware that they were no longer enrolled, the margin of error attributable to sampling is estimated to be ±5.2%. Additionally, this sample size will provide 80% statistical power to determine whether there is a 21-percentage-point difference or larger in the number of older women who are eligible but not enrolled versus younger women (e.g., 28% or fewer women aged ≥35 are eligible but not enrolled vs 50% of women under age 35).

Table 1.5. Reasons women did not re-enroll in Plan First and contraceptive use, by age

	Age, years			
	19-24 (n=125)	25-34 (n=125)	35-44 (n=25)	45-54 (n=25)
Aware not enrolled in Plan First				
Yes				
No				
Eligibility for Plan First				
Eligible				
Ineligible, currently pregnant				
Ineligible, had tubal ligation, hysterectomy				
Ineligible, enrolled in MLIF				
Ineligible, income ≥146% FPL				
Reasons not enrolled in Plan First*				
Did not know how to re-enroll				
Problems getting transportation to re-enroll				
Problems providing documents to re-enroll				
No providers she wanted to see in the area				
Does not want family planning services				
Other reason				
Current contraceptive use†				
Sterilization				
IUD or implant				
Injectable				
Oral contraceptives				
Patch, ring				
Condoms, diaphragm, withdrawal				
No method				

*Among women eligible for the program. † Among women who are not pregnant.

Goal 2. Maintain a high level of awareness of the Plan First program among female enrollees.

The program goal is that 90% of surveyed enrollees will have heard of Plan First, and 85% will be aware that they are enrolled in the program.

Hypotheses: Since Plan First is a well-established program, we expect that the majority of women enrolled will have heard of it and will be aware that they are enrolled.

To assess women's awareness of Plan First and their own enrollment in the program, we will conduct a telephone survey of 800 women. We will determine the percentage of women who have heard of Plan First, who are aware they are enrolled in the program, and compare differences in characteristics according to women's awareness of their enrollment status, using chi-squared tests and following the table template below. This sample size will provide 80% statistical power to determine whether there is a 6-percentage-point difference or larger in the number of women using family planning services and contraception who are unaware of their enrollment compared to those who are aware.

Table 2.1. Characteristics of survey respondents, according to awareness of enrollment in Plan First

	Know Enrolled	Do Not Know Enrolled
	(%)	(%)
Has heard of Plan First		
Yes		
No		
Last family planning visit		
In last year		
More than year ago		
Never		
Reason for no visit in last year		
I did not think I needed one		
I was too busy to arrange an appointment		
I couldn't afford it		
I did not want to go to the place I went before		
The place I went before could not see me		
Other		
Reasons for not using family planning		
Don't like exam		
No provider you wanted to see		
Hard to reach on the phone		
Couldn't get appointment soon enough		
Waiting time too long at location		
Hours not convenient		
No transportation		
Family member opposes		
No child care		
No money to pay for visit		
Preferred provider does not take Medicaid		
Any birth control method used		
Reasons for not using birth control		
Not having sex		
Want to get pregnant		
Concerned about side effects		
Don't think birth control works		
Religious reasons		
Too much trouble		
Don't think you can get pregnant		
Partner doesn't want you to		
Can't pay for method		
Can't find a place to go		
Ever pregnant		

	Know Enrolled	Do Not Know Enrolled
Age (mean)		
Education		
< high school		
high school		
more than high school		
Race/ethnicity		
White		
Black		
Hispanic		
Asian/Pacific Islander		
American Indian		
Other race/ethnicity		
Marital Status		
Never married		
Married		
Previously married		

Goal 3. Increase the proportion of Plan First enrollees who use family planning services in the initial year of enrollment and in subsequent years.

The program goal is to achieve 70% in the initial year and increase service use to 60% in subsequent years.

Hypotheses: Based on prior evaluations of Plan First, we expect service use to be more common among younger women than among older women, since younger women tend to rely on shorter acting hormonal methods for contraception and are recommended for routine STI and cervical cancer screening, both of which require more regular contact with providers. Because Plan First offers no-cost contraception, we also expect more than half of women using services to have a claim for a moderate or highly effective contraceptive method.

The types of services that women enrolled in Plan First use are *key indicators of the quality of care* provided through the program. We will report on these indicators using the table templates presented below. Men's use vasectomy-specific services is reported as part of Goal 6, since vasectomy and vasectomy-related care coordination are the only services available to men in Plan First.

Table 3.1. Unduplicated number of female beneficiaries with any claim for services, age group and quarter

	19-20*	21-44	45-55	Total Users	Percent of women enrolled
Quarter 1 (October-December)					
Quarter 2 (January-March)					
Quarter 3 (April-June)					
Quarter 4 (July-September)					

*Women <19 years of age are not eligible for Plan First.

In addition to reporting the primary method used by women enrolled in the program (Table 3.2), we will report on the overall percentage of women who were provided with a moderately or highly effective contraceptive method. We will define this indicator according to the Health Care Quality Measures for Medicaid Eligible Adults (Measure CCW). Specifically, moderately and highly effective methods will include female sterilization, the contraceptive implant, intrauterine devices or systems (IUD/IUS), injectables, oral contraceptives, hormonal patch, ring and diaphragms.

Table 3.2. Utilization of primary method by age group

	19-20	21-44	45-55	Total	Percentage of all methods
Sterilization					
Emergency contraception					
IUD					

Implant					
Injectable					
Oral contraceptives					
Patch					
Ring					
Diaphragm					
Female condoms*	--	--	--	--	--
Male condoms*	--	--	--	--	--

*Not included in claims for Plan First

We also will use the claims data to compute the percentage of women using specific contraceptive methods and compare differences in use according to the type of provider from whom a participant obtained services and her public health district, using chi-squared tests. This information, along with the overall percentage of women using a long-acting reversible contraceptive method (IUD/IUS or implant), will provide useful *indicators of women's access* to the full range of contraceptive methods and potential disparities in access.

Table 3.3. Utilization of primary method, by provider type and public health district

	Sterilization	IUD/IUS or implant	Injectables	Oral contraceptives	Other hormonal method
	N (%)	N (%)	N (%)	N (%)	N (%)
Provider type					
Health Department (Title X)					
Private provider					
Other provider					
Public Health District					
Northern					
Northeastern					
Jefferson					
East Central					
West Central					
Southeastern					
Southwestern					
Mobile					

As an indicator of the quality of contraceptive care, we will determine whether women are using their preferred method of contraception. Following our approach in previous evaluations, we will include questions about the birth control method women are currently using and the method they would like to use in our telephone survey, and compute the percentage of women using their preferred method. We also will ask women why they are not using the method they prefer to identify potential opportunities to meet women's contraceptive preferences in Plan First.

Table 3.4. Current Contraceptive Method Use and Preference

Method Using Now	% using method	% prefer using this method
Tubal ligation		
Vasectomy		
IUD		
Implanon/Nexplanon		
Injectables		
Oral contraceptives		
Patch		
Condoms		
Natural Family Planning		
Withdrawal		
Other method		

Screening for sexually transmitted infections (STIs), cervical and breast cancer are other quality of care indicators that will be included in our evaluation report. To assess screening for STIs, we will use claims for chlamydia, gonorrhea, herpes, HIV, syphilis and trichomonas. We will report this indicator for women only since STI screening is not a covered benefit for men enrolled in Plan First. We also will report separately on chlamydia screening for sexually active women 21-24, following the Health Care Quality Measures for Medicaid Eligible Adults (Measure CHL-AD). We will evaluate cervical cancer screening according to the Health Care Quality Measures for Medicaid Eligible Adults recommendation (Measure CCS-AD) by evaluating claims for a Pap test in the demonstration year or 2 prior years for women 21-55 and claims for HPV co-testing in the demonstration year or 4 prior years for women 30-55. Claims for clinical breast exams will be used to assess the number (percentage) of women who received this service.

Table 3.5. Beneficiaries screened for sexually transmitted infections, cervical and breast cancer during the demonstration year

	Number of women tested or screened	Percent of women enrolled
Sexually transmitted infections		
Chlamydia*		
Cervical cancer		
Breast cancer		

*reported for women 21-24 only

We also will assess how participation in Plan First varies according to women's initial and subsequent enrollment. We will calculate the number and percentage of women using clinical and non-clinical services, and compare differences according to women's type and duration of enrollment using chi-squared tests. This will provide evidence of women's demand for services and identify potential sub-groups for focused outreach on program services. This assessment will use data from eligibility determination and Plan First claims.

Table 3.6. Type of Plan First participation, according to women's duration of enrollment

	Newly enrolled		Re-enrolled	
	Postpartum	Not postpartum	From DY17	From DY17 & DY16
Used clinical services				
Any service				
Contraceptive services				
Only had non-clinical encounter				
Only had case management				
Did not use services				
Total				

DY: Demonstration Year

Goal 4. Increase the portion of Plan First enrollees who receive smoking cessation services or nicotine replacement products.

The program goal is to have 85% of smokers receiving these services.

Hypothesis: Data from recent surveys of Plan First enrollees indicate that approximately 25% are smokers. We expect that the majority of enrolled smokers will report that their health care provider advised them to quit smoking and about half will report they were provided with information about smoking cessation services.

Smoking cessation coverage has been available in Plan First since 2012. As a key *process indicator* of offering this coverage, we calculate the number and percentage of Plan First participants in the telephone survey who were asked by their Plan First provider about smoking and which smoking cessation options were discussed: use of Nicotine gum, patch, spray, pill or referral to the Alabama Quit Line. We also will assess the number and percentage of women who are interested in using these products and services to quit smoking.

Table 4.1. Smoking among Plan First participants and content of smoking cessation discussions at family planning visits

	N	**%**
Reported Smoking		
Asked about smoking at FP visit		
Advised to quit by FP provider		
Received NRT		
Referred to Quit Line		
Received either NRT or Quit Line referral		
Paid out of pocket for NRT products		
Interest in using products/services to quit		

Following previous evaluations, we also will continue to assess two main *outcomes*: the number of Plan First participants who were referred to the Alabama Quit Line and the number who had a claim for a smoking cessation product.

Table 4.2. Smoking Cessation based on Claims and Quit Line Data

	N	%
Plan First service users		--
Estimated number of smokers		
Paid claims for covered NRT products		
Quit Line referrals received from care coordinator		

Goal 5. Maintain birth rates among Plan First participants, which are lower than the estimated birth rates that would have occurred in the absence of the Plan First demonstration.

A rate of about 100 births per 1000 enrollees is estimated to be sufficient to achieve budget neutrality for Plan First.

Hypothesis: Based on prior evaluations of Plan First, we hypothesize that the birth rate among program participants will be less than the expected birth rate in the absence of the program. We also anticipate that birth rates will be lower among women who used Plan First services than those who enrolled but did not have a clinical encounter.

We will evaluate this *outcome* of the program for all women enrolled in Plan First and according to their use of services in the program using SOBRA maternity claims matched to Plan First enrollment and claims files. Following our approach for estimating the birth rate in prior evaluations, we will count births that occurred through 9 months after the end of the demonstration year and exclude births from pregnancies that occurred before women enrolled. Therefore, reports of the birth rate and births averted will be available with a one-year lag (i.e., the birth rate reported in DY18 will reflect those that occurred to women enrolled in DY17). We will compare differences in birth rates among categories of service and non-service users using Poisson regression. Data on cost savings from births averted will be reported separately in the budget neutrality section.

Table 5.1 Estimated and actual birth rates to women enrolled in Plan First

	Number Enrollees	**Number of Births**	**Births/1000**
All enrollees (assuming pre-waiver fertility levels)	**--**	**--**	
All Enrollees (actual births)			
Service Users			
Any risk assessment or case management			
No risk assessment or case management			
Any visit to Title X clinic			
No visit to Title X clinic			
Non-service users			

Goal 6. Increase the number of income-eligible men age ≥21 years who are enrolled in the Plan First program and the proportion of male enrollees undergoing vasectomy.

Our goal is that the number of men enrolled in Plan First for vasectomies and vasectomy-related covered services will increase by 10% annually, 85% of male Plan First enrollees will receive care coordination services, and 75% of male enrollees will undergo the procedure within the enrollment year. We will evaluate this goal based on the number of men enrolled and claims for care coordination and vasectomies.

Hypothesis: We anticipate that men's use of vasectomy services will increase over time, and that those who receive care coordination services will be more likely to obtain a vasectomy through Plan First than those who do not receive care coordination.

We will track men's enrollment and use of vasectomy services using the table templates below.

Table 6.1. Unduplicated number of male enrollees by quarter

	19-20*	21-44	45-55	Total enrollment
Quarter 1 (October-December)	--			
Quarter 2 (January-March)	--			
Quarter 3 (April-June)	--			
Quarter 4 (July-September)	--			

*Men <21 years of age are not eligible for Plan First.

Table 6.2. Unduplicated number of men with claims for vasectomy services, by age group and quarter

	19-20*	21-44	45-55	Total Users	Percent of men enrolled
Quarter 1 (October-December)	--				
Quarter 2 (January-March)	--				
Quarter 3 (April-June)	--				
Quarter 4 (July-September)	--				

*Men <21 years of age are not eligible for Plan First.

We also will compare differences in vasectomy use among enrolled men according to their race, receipt of care coordination services and public health district, using chi-squared tests. This will help us identify sub-groups where additional education and outreach may be needed to improve access to care.

Table 6.3. Percentage of men enrolled who obtained a vasectomy through Plan First

	Enrolled N (%)	Obtained vasectomy N (%)
Race		
White		
Black		
Hispanic		
Asian/Pacific Islander		
American Indian		
Other race/ethnicity		
Care Coordination		
Received care coordination		
Did not receive care coordination		
Public Health District		
Northern		
Northeastern		
Jefferson		
East Central		
West Central		
Southeastern		
Southwestern		
Mobile		
TOTAL		

We also will track the number of care coordination hours billed for male Plan First enrollees.

Table 6.4. Hours of contact for men who received care coordination services.

	DY18	DY19	DY20	DY21	DY22
Number of male clients					
Mean number of encounters (hours of contact)					

Since vasectomy coverage for men is a new component of Plan First, we will evaluate men's experiences with this service, including their perceptions of access to Plan First providers, the quality of care from care coordinators and vasectomy providers, and their overall satisfaction with the program. In DY18, we plan to conduct up to 25 in-depth interviews with men enrolled in Plan First - those with and without a claim for vasectomy – to capture a range of experiences in their processes enrolling for, seeking and obtaining vasectomy services through Plan First. This information will be used to develop a survey, which we plan to field with 100 men in each of the remaining 4 years of the current demonstration. This sample size is feasible, given the number of men enrolled who we expect to be able to contact. With a sample size of 100 men and an estimated 75% of men reporting that it was somewhat or very easy to make an appointment with a vasectomy provider, the margin of error attributable to sampling is estimated to be ±8.5%.

PART II: Continue monitoring trends in Plan First

In this second part of the evaluation plan, we propose to continue monitoring trends in enrollment and service use, awareness of the program among those enrolled, contraceptive service use and provider participation, use of smoking cessation services, and the impact of the Plan First Program on birth rates. Comparisons largely will be descriptive, and we will use Poisson regression to compute the average annual change over time, as appropriate. Below are tables that we propose monitor these trends.

Trends in enrollment and overall service use

Table 1.1. Plan First enrollment

	DY14	DY15	DY16	DY17	DY18	Annual change N (%)
Age						
19-29	102,469	86,147	86,487			
30-39	34,982	32,566	34,524			
≥40	10,609	9,760	10,276			
Race						
Black	76,716	68,247	69,951			
White	65,889	55,390	53,932			
Hispanic	--	--	--			
Asian/Pacific Islander	--	--	--			
American Indian	--	--	--			
Other	5,455	4,836	7,404			
Public Health Area						
1	9,587	8,309	8,583		--	
2	19,530	16,845	17,149		--	
3	9,144	8,161	8,233		--	
4	19,516	16,004	15,980		--	
5	11,898	10,099	10,105		--	
6	11,466	10,251	10,422		--	
7	7,121	6,370	6,539		--	
8	20,959	18,312	19,173		--	
9	11,350	9,864	10,272		--	
10	10,724	9,737	10,050		--	
11	16,765	14,481	14,880		--	
Public Health District						
Northern	--	--	--	--		
Northeastern	--	--	--	--		
Jefferson	--	--	--	--		
East Central	--	--	--	--		
West Central	--	--	--	--		
Southeastern	--	--	--	--		
Southwestern	--	--	--	--		
Mobile	--	--	--	--		

Table 1.2. Plan First service use

	DY14	DY15	DY16	DY17	DY18	Annual change N (%)
Age						
19-29	52,334	43,132	43,834			
30-39	12,856	12,801	13,007			
≥40	3,009	2,796	2,934			
Race						
Black	38,795	34,139	34,328			
White	27,191	21,928	22,314			
Hispanic	--	--	--			
Asian/Pacific Islander	--	--	--			
American Indian	--	--	--			
Other	2,213	1,942	3,133			
Public Health Area						
1	5,079	4,230	4,652		--	
2	7,822	6,320	6,524		--	
3	4,628	3,996	4,139		--	
4	6,266	5,438	5,279		--	
5	5,050	4,182	4,421		--	
6	5,890	5,066	5,372		--	
7	4,515	3,967	3,972		--	
8	9,476	8,059	8,340		--	
9	5,987	5,055	4,999		--	
10	5,703	5,055	5,622		--	
11	7,783	6,641	6,455		--	
Public Health District	--	--	--	--		
Northern	--	--	--	--		
Northeastern	--	--	--	--		
Jefferson	--	--	--	--		
East Central	--	--	--	--		
West Central	--	--	--	--		
Southeastern	--	--	--	--		
Southwestern	--	--	--	--		
Mobile	--	--	--	--		

Table 1.3. Plan First Participation by Women with Recent Medicaid Maternity Care, by Maternity Care Program District

Maternity Care District	Demonstration Year (DY)				
	DY14	DY15	DY16	DY17	DY18
Total					
Women with SOBRA deliveries in the previous year and this year	49,760	38,575	36,978		
Women with Plan First participation in DY	13,901	10,406	8,345		
% of women with deliveries participating in Plan First	27.9%	27.0%	22.6%		

District 1 (Colbert, Franklin, Lauderdale, Marion)					
Women with SOBRA deliveries in the previous year and this year	2,194	1,627	1,606		
Women with Plan First participation in DY	684	493	431		
% of women with deliveries participating in Plan First	31.2%	30.3%	26.8%		
District 2 (Jackson, Lawrence, Limestone, Madison, Marshall, Morgan)					
Women with SOBRA deliveries in the previous year and this year	7,099	5,500	5,569		
Women with Plan First participation in DY	1,658	1,242	1,043		
% of women with deliveries participating in Plan First	23.4%	22.6%	18.7%		
District 3 (Calhoun, Cherokee, Cleburne, DeKalb, Etowah)					
Women with SOBRA deliveries in the previous year and this year	3,686	2,934	2,817		
Women with Plan First participation in DY	953	764	625		
% of women with deliveries participating in Plan First	25.8%	26.0%	22.2%		
District 4 (Bibb, Fayette, Lamar, Pickens, Tuscaloosa)					
Women with SOBRA deliveries in the previous year and this year	2,618	2,089	2,157		
Women with Plan First participation in DY	731	550	515		
% of women with deliveries participating in Plan First	27.9%	26.3%	23.9%		
District 5 (Blount, Chilton, Cullman, Jefferson, St. Clair, Shelby, Walker, Winston)					
Women with SOBRA deliveries in the previous year and this year	10,797	8,353	7,249		
Women with Plan First participation in DY	2,277	1,692	1,105		
% of women with deliveries participating in Plan First	16.4%	20.3%	15.2%		
District 6 (Clay, Coosa, Randolph, Talladega, Tallapoosa)					
Women with SOBRA deliveries in the previous year and this year	1,849	1,509	1,461		
Women with Plan First participation in DY	550	445	425		
% of women with deliveries participating in Plan First	29.7%	29.5%	29.1%		
District 7 (Greene, Hale)					
Women with SOBRA deliveries in the previous year and this year	332	257	226		
Women with Plan First participation in DY	122	93	38		
% of women with deliveries participating in Plan First	36.7%	36.2%	16.8%		
District 8					

(Choctaw, Marengo, Sumter)					
Women with SOBRA deliveries in the previous year and this year	469	356	333		
Women with Plan First participation in DY	172	131	108		
% of women with deliveries participating in Plan First	36.7%	36.8%	32.4%		
District 9 (Dallas, Perry, Wilcox)					
Women with SOBRA deliveries in the previous year and this year	838	541	554		
Women with Plan First participation in DY	390	233	239		
% of women with deliveries participating in Plan First	46.5%	43.1%	43.1%		
District 10 (Autauga, Bullock, Butler, Crenshaw, Elmore, Lowndes, Montgomery, Pike)					
Women with SOBRA deliveries in the previous year and this year	5,062	4,019	3,770		
Women with Plan First participation in DY	1,465	1,120	877		
% of women with deliveries participating in Plan First	28.9%	27.9%	23.3%		
District 11 (Barbour, Chambers, Lee, Macon, Russell)					
Women with SOBRA deliveries in the previous year and this year	2,783	2,125	2,094		
Women with Plan First participation in DY	817	595	495		
% of women with deliveries participating in Plan First	29.4%	28.0%	23.6%		
District 12 (Baldwin, Clarke, Conecuh, Covington, Escambia, Monroe, Washington)					
Women with SOBRA deliveries in the previous year and this year	3,476	3,598	3,612		
Women with Plan First participation in DY	1,209	644	1,410		
% of women with deliveries participating in Plan First	34.8%	17.9%	39.0%		
District 13 (Coffee, Dale, Geneva, Henry, Houston)					
Women with SOBRA deliveries in the previous year and this year	2,366	2,604	2,667		
Women with Plan First participation in DY	880	494	1,029		
% of women with deliveries participating in Plan First	37.2%	19.0%	38.6%		
District 14 (Mobile)					
Women with SOBRA deliveries in the previous year and this year	5,156	5,424	5,454		
Women with Plan First participation in DY	1,912	929	1,935		
% of women with deliveries participating in Plan First	37.1%	17.1%	35.5%		

Table 1.4. Availability and Visit Volume for Private Providers

PHA	# Private Providers			# Visits to Private Providers			% Total Visits to Private Providers		
	DY16	DY17	DY18	DY16	DY17	DY18	DY16	DY17	DY18
Total	960			29,929			24.9		
1	63			1,216			17.1		
2	178			3,915			40.7		
3	47			901			14.4		
4	83			1,703			22.2		
5	58			812			12.2		
6	75			1,770			22.3		
7	45			1,927			27.6		
8	133			7,353			17.8		
9	99			3,137			39.4		
10	63			720			8.4		
11	116			6,475			63.6		

Awareness of Plan First

Table 2.1. Awareness of Plan First

	Had heard of Plan First before survey (%)	Aware of enrollment (%)	
		Among all surveyed	Among those who had heard of Plan First
DY1	76.8	56.2	73.1
DY2	82.5	64.2	77.9
DY3-4	81.0	64.9	80.2
DY5	85.3	63.6	74.9
DY6	86.8	70.2	82.5
DY7	92.9	80.8	87.1
DY8	88.9	85.3	85.9
DY9	90.8	79.7	87.8
DY10	88.7	78.3	88.2
DY11	90.1	79.3	88.1
DY12	88.7	77.2	87.0
DY13	89.9	79.9	88.9
DY14	90.1	74.9	83.2
DY15	92.6	78.8	85.0
DY16	91.1	77.6	85.2

Contraceptive service use

Table 3.1. Contraceptive use among women

Use of Contraceptives	DY14	DY15	DY16	DY17	DY18
N	1,070	1,080	1,070		
% used any contraception	84.1	85.6	81.6		
% used effective contraception*	75.8	81.3	74.5		
% Tubal	5.3	5.0	9.7		
% Vasectomy	1.3	2.0	2.5		
% IUD	16.4	20.0	18.1		
% Implanon/Nexplanon	15.1	15.6	15.7		
% Depo	39.1	41.5	36.9		
% BC Pills	58.0	53.5	53.3		
Got BC pills from Health Dept.	58.4	51.7	53.5		
Got BC pills from free sample	18.5	21.8	19.7		
Got BC pills from drug store	22.7	26.1	25.9		
Don't know, not sure	0.4	0.4	0.9		
% Nuva-Ring	8.5	7.6	7.9		
Got ring from Health Dept.	46.7	47.1	34.8		
Got ring from free sample	29.9	31.4	40.6		
Got ring from drug store	20.8	21.4	23.2		
Don't know, not sure	2.6	0.0	1.4		
% Patch	6.8	5.7	5.9		
Got patch from Health Dept.	54.1	35.8	40.4		
Got patch from free sample	24.6	26.4	30.8		
Got patch from drug store	21.3	37.7	26.9		
Don't know, not sure	0.2	0.0	1.9		
% Plan B	9.3	7.8	7.4		
% Condoms	78.6	71.0	70.1		
% Natural FP	7.9	8.0	9.4		
% Withdrawal	50.3	51.0	48.2		

*includes any respondent reporting use of tubal ligation, partner vasectomy, IUD, Nexplanon, Depo-Provera, Birth Control Pills, Nuva Ring and/or Patch.

Table 3.2. Contraceptive use by age

	Age 19-24			Age 25-34			Age ≥35		
Methods	**DY16**	**DY17**	**DY18**	**DY16**	**DY17**	**DY18**	**DY16**	**DY17**	**DY18**
	N=239			N=629			N=244		
% Used any method	81.6			83.4			76.8		
% Used effective method*	74.7			76.2			69.8		
Tubal ligation	2.1			9.4			18.2		
Vasectomy	0.0			1.2			6.6		
IUD	9.6			20.5			20.4		
Implanon/Nexplanon	18.7			16.7			9.9		
Depo	43.8			36.2			31.5		
BC pills	50.3			54.3			53.6		
Nuva-Ring	8.0			8.1			7.2		
Patch	4.3			6.3			6.6		
Plan B	8.0			8.9			2.8		
Condoms	74.3			69.7			66.8		
Natural FP	9.1			9.2			9.9		
Withdrawal	56.7			47.6			40.9		

*includes any respondent reporting use of tubal ligation, partner vasectomy, IUD, Nexplanon, Depo-Provera, Birth Control Pills, Nuva Ring and/or Patch.

Table 3.3. Services provided according to provider type

Service Type	**Provider Type**	**DY14**	**DY15**	**DY16**	**DY17**	**DY18**
Care Coordination	Health Department	52.5%	53.3%	50.3%		
	Private	11.6%	4.6%	3.5%		
	Both	60.6%	57.1%	52.1%		
	Neither	34.2%	33.4%	20.3%		
	Total with Service	25,654	21,559	13,258		
	% All Clients	37.6%	37.2%	29.6%		
HIV Counseling	Health Department	44.6%	61.7%	61.9%		
	Private	1.7%	2.5%	2.4%		
	Both	37.1%	56.1%	57.2%		
	Neither	6.8%	8.1%	8.5%		
	Total with Service	16,391	20,042	13,464		
	% All Clients	24.0%	34.5%	30.1%		
Tubal Ligations	Health Department	0.2%	0.1%	0.2%		
	Private	1.0%	1.2%	1.0%		
	Both	6.3%	5.8%	4.8%		
	Neither	1.5%	1.7%	1.0%		
	Total with Service	564	515	340		
	% All Clients	0.8%	0.9%	0.8%		
Depo Provera	Health Department	40.6%	42.2%	44.4%		
	Private	37.3%	38.1%	39.1%		
	Both	42.2%	45.0%	47.4%		
	Neither	0%	0%	0%		
	Total with Service	20,257	17,895	12,374		
	% All Clients	29.7%	30.8%	27.6%		
Birth Control Pills	Health Department	28.5%	36.6%	36.5%		
	Private	18.0%	1.4%	8.5%		
	Both	24.8%	29.2%	28.7%		
	Neither	27.7%	6.3%	14.2%		
	Total with Service	17,406	12,036	10,029		
	% All Clients	25.5%	20.7%	22.4%		

Smoking cessation

Table 4.1 Smoking Cessation Based on Enrollee Survey Data

	DY14 N (%)	**DY15** N (%)	**DY16** N (%)	**DY17** N (%)	**DY18** N (%)
Reported Smoking	283 (28.6)	269 (25.8)	265 (26.1)		
Asked about smoking at FP visit	265 (93.6)	248 (92.2)	240 (90.6)		
Advised to quit by FP provider	212 (80.0)	205 (82.7)	197 (82.1)		
Received NRT	111 (41.9)	121 (48.8)	112 (46.7)		
Referred to Quit Line	110 (41.5)	132 (53.2)	133 (55.4)		
Received either NRT or Quit Line referral	149 (56.2)	158 (63.7)	158 (65.8)		
Paid out of pocket for NRT products	--	30 (12.1)	27 (11.2)		

-- Not asked in Enrollee Survey

Table 4.2. Smoking Cessation based on Claims and Quit Line Data

	DY16 N (%)	DY17 N (%)	DY18 N (%)
Number of service users	62,608		
Estimated number of smokers	16,341		
Number receiving NRT (paid claim)	39		
Number receiving Quit Line referral from care coordinator	93		

Estimated and actual birth rates

Table 5.1. Birth Rates per 1000

	Estimated birth rate if fertility rates continued at pre-waiver levels	Actual birth rates all enrollees – pregnancies starting during DY	Actual birth rates service users – pregnancies starting during DY	Actual birth rates non-service users – pregnancies starting during DY
DY1	189.8	60.0	47.8	72.3
DY2	200.7	87.5	54.3	118.9
DY3	204.7	96.6	56.5	131.1
DY4	205.9	92.0	56.2	122.9
DY5	202.6	98.3	58.6	121.7
DY6	224.1	81.8	31.1	105.4
DY7	215.0	57.2	44.0	69.7
DY8	214.8	75.7	65.0	86.6
DY9	127.1	59.1	43.3	78.2
DY10	202.3	69.1	60.8	97.0
DY11	200.1	73.3	58.3	92.6
DY12	180.1	77.3	60.8	97.0
DY13	199.9	84.0	72.5	88.6
DY14	203.1	72.4	58.3	84.9
DY15	196.7	62.7	61.0	63.9

Evaluation Budget

We estimate the total cost of the Evaluation Design for the waiver approval period at $86,841 per year. The staffing, data collection and administrative costs are listed in the accompanying table and described below.

Line Item	Components of budget	Cost of each line item
1	Estimated staff	$37,854
2	Survey administration	$26,000
3	Other administrative cost	$22,984
	Total Amount	$86,841

Staffing

Kari White, PhD MPH, Associate Professor, University of Alabama at Birmingham. Dr. White will have overall responsibility for the evaluation, including the developing the evaluation design and data collection instruments, overseeing evaluation staff and analysis of the claims and survey data, and preparing the annual reports. We estimate her annual effort at $9,193.

Janet Bronstein, PhD, Professor Emeritus, University of Alabama at Birmingham. Dr. Bronstein will provide guidance on the evaluation design and data collection instruments and will assist with data analysis and conceptualizing results for the annual report, based on her experience as the lead evaluator for Plan First between 2000 and 2017. We estimate her annual effort at $988.

Lei Huang, MPH, Statistician, University of Alabama at Birmingham. Ms. Huang will be responsible for data management, data cleaning and analyzing the enrollment, claims and survey data for the annual reports. We estimate her annual effort at $18,674.

Elizabeth Howard, MPH, Program Director, University of Alabama at Birmingham. Ms. Howard will coordinate the administration of the annual surveys with the Survey Research Unit at UAB, prepare protocols for Institutional Review Board submissions, and assist with preparing the annual reports. We estimate her annual effort at $8,999.

Survey Administration

Survey Research Unit, University of Alabama at Birmingham. The Survey Research Unit (SRU) will be responsible for contacting Plan First enrollees for the annual survey, administering the survey and preparing a dataset and codebook of survey responses for Dr. White and Ms. Huang to analyze. We estimate the annual cost for these tasks at $26,000.

Other administrative costs

Indirect costs ($22,987) have been calculated at 36% of UAB's base direct costs ($63,854).