



Policy Report
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**Iowa Family
Planning
Demonstration
Evaluation Third
Waiver Period**

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Executive Summary

Family Planning Demonstration

The State of Iowa extended the 1115 Family Planning Demonstration through December, 2016. The waiver provides family planning services to men and women 12–54 years of age with income not exceeding 300% of the Federal poverty level (FPL) for the family size. The extension contains the objectives listed below.

- 1) Improve the access to and use of Medicaid family planning services by women who have received a Medicaid pregnancy related service.
- 2) Improve birth outcomes and the health of women by increasing the child spacing interval among women in the target population.
- 3) Decrease the number of Medicaid-paid deliveries, which will reduce annual expenditures for prenatal, delivery newborn, and infant care.
- 4) Reduce the number of unintended and unwanted pregnancies among women eligible for Medicaid.
- 5) Reduce teen pregnancy by reducing the number of repeat teen births.
- 6) Estimate the overall savings in Medicaid spending attributable to providing family planning services to women for 2 years postpartum.

The 1115 Family Planning Demonstration “Iowa Family Planning Network” began in February 1, 2006. This report indicates the following successes.

Successes

- 1) The demonstration has increased the number of women receiving family planning services within the Medicaid program. Over 65,000 women have accessed family planning services through this demonstration. However, the number of women served annually through the FPD has fallen since the beginning of the Iowa Health and Wellness Plan, Iowa’s expanded coverage option.
- 2) Reductions in Medicaid costs for deliveries and birth and first year of life are over \$250 million.
- 3) Net Medicaid savings are over \$200 million from this demonstration.

Introduction

The evaluation plan for the extension mirrors the previous work very closely with adjustments for changes in the objectives as reflected above. In particular, we include men in the analyses of family planning service usage. The evaluation budget is limited to \$20,000 per year. This level of support provides no funding for survey work or extensive data analyses. For this reason, the evaluation team is unable to perform target surveys to determine whether births were intended or unintended as has been done by evaluation teams in other states. Complex modeling to determine the effects of the expansion are also limited due to time and resource constraints. The simple evaluation plan provided may not adequately address all of the state's objectives.

Data

Evaluation data are compiled from claims and enrollment files for the period January 1, 2001 through December 31, 2014. The following protocols clarify the methods, operationalize variables and formulas needed to complete the analyses.

Year to allocate services: The services provided on a claim are counted within the year of the first date of service. This decision rule is important in determining the costs for prenatal care and birth for the baseline numbers. As an example, a woman admitted to the hospital for delivery on December 30, 2008 and discharged on January 3, 2009 will have the costs for delivery added to the total for the study year 2008.

Mothers and children: Children and mothers are not matched when determining rates or costs. Costs for all women who are enrolled in Child Medical Assistance Program (CMAP), Family Medical Assistance Program (FMAP) and Mothers and Children program (MAC) when they deliver are used to determine the cost per delivery by year. Any claim with a DRG of 370–375 (prior to November 2011), a DRG of 765–768, 774 or 775 (November 2011 onward), or diagnosis code with V27 or 650 is considered a delivery; this is unique to the mother. All costs for deliveries are calculated and divided by the number of women delivering in a given year to determine average delivery cost per year. All costs for birth, unique to the child, are calculated and divided by the number of children to determine the average birth cost per year. Delivery cost and birth cost for each year are added to determine the total birth-related cost per year.

Number of people under 300% poverty: Sources to estimate the number of people within the state under 300% of poverty were investigated. There are no reliable estimates of people under 300% of poverty across the state for the evaluation period or the age groups of interest.

Enrollment

The Family Planning Demonstration (FPD) began enrolling men in December 2011; enrollment peaked in December 2012 with 641 men enrolled. The monthly enrollment numbers for women peaked at nearly 27,000 in November 2012.

Figures 1 and 2 show the enrollment levels for all members during calendar years 2006–2014 and 2010–2014, respectively. Though there were minimal yet steady declines in CY 2013, there was a 25% reduction in women enrolled in FPD by the end of CY 2014. Though it is difficult to understand this phenomenon, we believe it may be related to the introduction of the Iowa Health and Wellness Plan (IHAWP), Iowa's expanded coverage option.

Figure 3 provides a visual representation of the total number of women leaving

FPD, the total number of women entering FPD, the net change in the number of women enrolled in FPD and the number of women who moved from FPD to Iowa Health and Wellness Plan. Though on average 2300 women leave FPD every month additional women are normally enrolled resulting in fairly stable numbers of enrolled women up through CY 2013. Beginning in 2014 the numbers enrolled per month begin to drop. This is most likely due to the shift in enrollment of women to IHAWP; note the decrease in FPD enrollment as the IHAWP enrollment climbs after January 2014.

Figure 1. Women Enrolled in FPD by month, CY 2006–2014

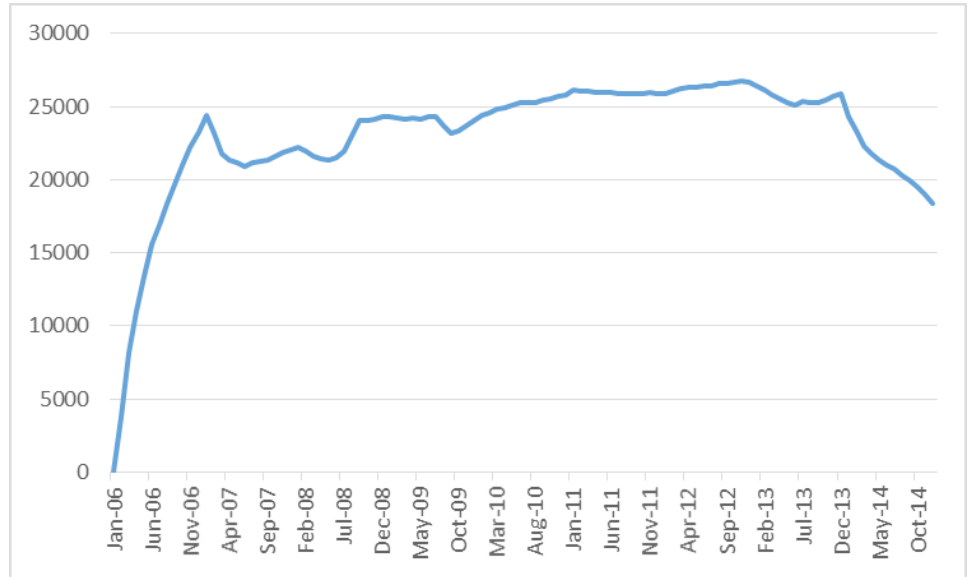


Figure 2. Men Enrolled in FPD by month, CY 2010–2014

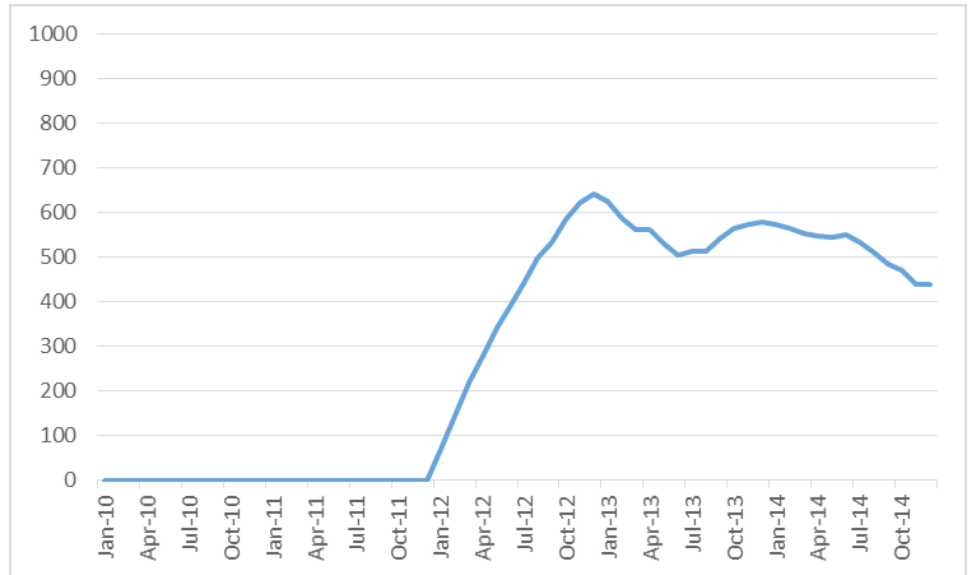
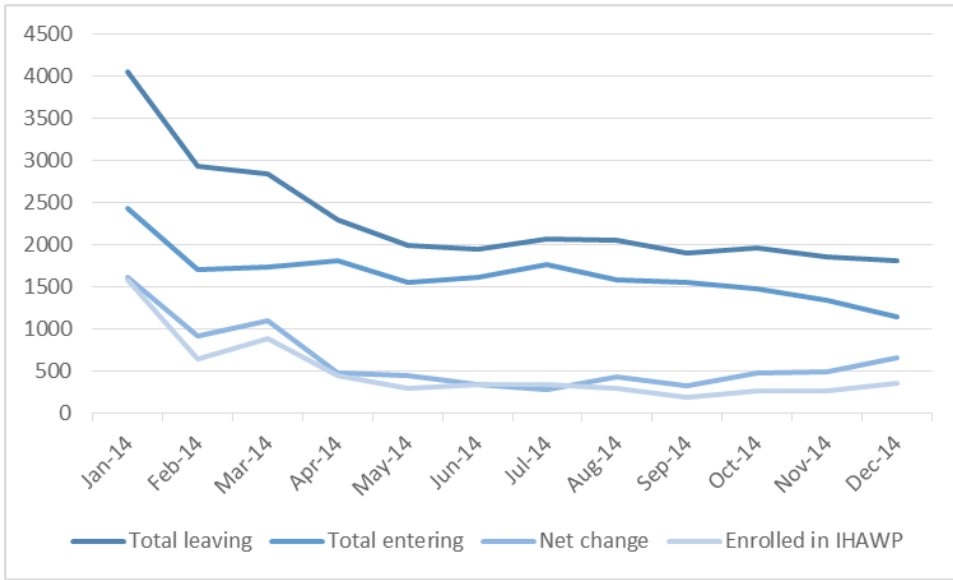


Figure 3. Change in enrollment for women leaving FPD, CY 2014



Results

Family planning services

Objective 1: Improve the access to and use of Medicaid family planning services by women and men under 300% FPL.

To address this objective we tracked the number of women within the eligible population with a Medicaid-paid family planning service, as defined on the CMS website, during the measurement years.

Data source	Medicaid claims and encounter and enrollment data
Eligible population	Women 12–54 years of age who were enrolled in Medicaid for at least one month during the measurement year
Measurement years	2006–2014
Measure	Costs per member per month (PMPM) for women within the demonstration

Results

The costs for family planning services to women in the demonstration are shown in Table 1. Actual costs rose from \$5,192,124 to \$9,494,280 over the first four years of the program, declining for the following two years then rising to peak at \$9,717,669 in calendar year 2012 before falling to \$5,674,214 in calendar year 2014. The cost for men’s family planning services in 2012 was \$88,161 falling to \$64,312; \$10.35 per member per month in CY 2014.

The number of women served through the family planning program falls over CY 2014 from 10,957 in January to 7,358 in December. Only 164 men were served in January and this fell to 103 in December.

Table 1. Cost of female family planning services, 2006–2014

Year	Total cost	PMPM costs	PMPY costs
2006	\$ 5,192,124	\$ 29.97	\$ 359.61
2007	\$ 6,931,922	\$ 26.45	\$ 317.40
2008	\$ 8,649,314	\$ 31.83	\$ 381.98
2009	\$ 9,494,280	\$ 33.01	\$ 396.09
2010	\$ 9,206,530	\$ 30.47	\$ 365.69
2011	\$ 8,568,748	\$ 27.51	\$ 330.09
2012	\$ 9,717,669	\$ 30.65	\$ 367.77
2013	\$ 8,627,444	\$ 28.08	\$ 336.98
2014	\$ 5,674,214	\$ 22.52	\$ 270.26

Objective 2: Improve birth outcomes and the health of women by increasing the child spacing interval among women in the target population.

In the previous evaluation we were able to determine the rates of repeat births by measuring the number of women who had delivered a child within 24 months of a previous birth.

Data source	Medicaid claims and enrollment files
Eligible population	Women 12–54 years of age enrolled in Medicaid who had a delivery during the measurement year
Measurement years	2012–2014

Spacing measure	Number of months from first birth record to second birth record for women who had a repeat birth.
Repeat measure	Proportion of women who had a repeat birth within 24 months

Results

We have not addressed this objective.

Medicaid deliveries

Objective 3: Decrease the number of Medicaid-paid deliveries, which will reduce annual expenditures for prenatal, delivery newborn, and infant care.

A decrease in the number of repeat births by nature indicates a decrease in the rate of Medicaid-paid deliveries. In addition, covering family planning services for women who have not qualified for this coverage before should result in fewer births, as women are able to access continuous family planning. Given that the use of family planning services normally results in the avoidance of pregnancy, we anticipate that the annual rate of Medicaid paid deliveries will decrease.

Data source	Medicaid claims and enrollment files
Eligible population	Women 12–54 years of age enrolled in Medicaid who had a delivery during the measurement year.
Measurement years	2007–2014
Count of deliveries	Count of all deliveries regardless of status at birth for each measurement year (multiples will be counted as one delivery)

Results

Figure 4 provides a graphical representation of demonstration effects. There are 4 lines on the graph:

- FMAP deliveries per quarter for 5 years prior to the demonstration
- FMAP deliveries per quarter for the demonstration period
- MAC deliveries per quarter for the 5 years prior to the demonstration
- MAC deliveries per quarter for the demonstration period

The upper bound estimated for averted births is provided by subtracting the MAC slope after the program from the MAC slope before the program. A conservative estimation procedure that attempts to account for enrollment changes was also used. The slope of the line for MAC before the demonstration minus the adjusted value for the slope of the FMAP line before the demonstration provides an estimate of the slope of the MAC line before the program that may be accounted for by fertility rates before the program. The slope of the MAC line after the program began minus the adjusted slope of the line of FMAP provides an estimate of the slope of the MAC line that may be accounted for by fertility rates after the program. Subtracting the “after program” slope from the “before program” slope provides a number of averted births.

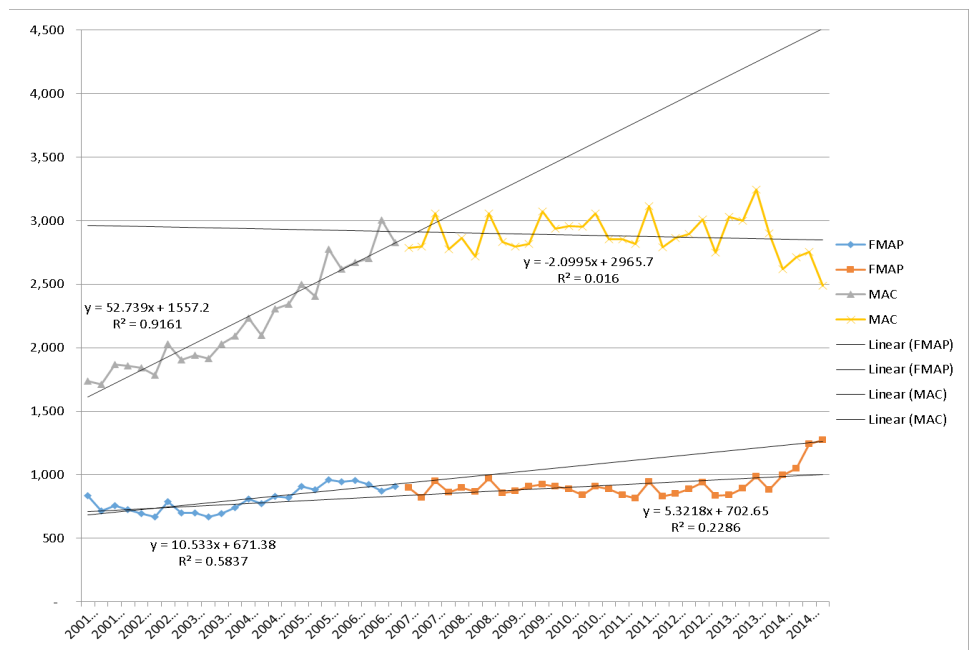
As an added measure to keep the estimates conservative the estimates of averted births are now based on the slopes based upon the data through the year listed on the table. For example, we previously adjusted the slope each year using the previous years of data, adding the current year to the chart and calculating a slope. The difference between the slope before and after for MAC was calculating and applied to the current year and all previous years. This year, we calculated each year according to the change in slope up to that period and did not adjust backwards for added years of data.

According to these methodologies, from 11,927 to 25,771 births were averted during the seven years of the demonstration. Table 2 provides the number of averted births by year using the upper and lower bound estimations and providing a midpoint.

Table 2. Estimation of averted births, upper, midpoint, and lower bound estimates, 2007–2014

Year	Upper	Midpoint	Lower
2007	296	260	225
2008	1352	969	587
2009	1794	1371	949
2010	2505	1907	1310
2011	3548	2610	1672
2012	4554	3293	2033
2013	5032	3713	2395
2014	6690	4723	2757
Total	25771	18846	11927

Figure 4. Numbers of deliveries by quarter, 2001–2014



Objective 4: Reduce the number of unintended and unwanted pregnancies among women eligible for Medicaid.

Under the assumption that any reduction in the birth rate represents a reduction in unintended pregnancies we will use the objective 3 analyses to evaluate this objective.

Objective 5: Reduce teen pregnancy by reducing the number of repeat teen births.

The evaluation of this objective is contained within the analyses for objective 2.

Objective 6: Estimate the overall savings in Medicaid spending attributable to providing family planning services to women for 1 year postpartum.

Four cost categories are combined to calculate Medicaid savings attributable

to providing family planning services to women 1 year postpartum. The birth and delivery costs consist of prenatal care, care given with a diagnosis code related to pregnancy prior to delivery; cost of birth care, costs associated with the delivery as indicated by a diagnosis code indicating a delivery; newborn care, care provided to a child under the age of 1 month; and infant care, all care provided to children from 1 month to 1 year of age whose births were paid for by the Medicaid program.

Data source	Medicaid claims files
Eligible population	Women 12–54 years of age enrolled in Medicaid and children birth through 1 year of age enrolled in Medicaid
Measurement years	2007–2014
Cost of care	Medicaid costs associated with claims bearing a diagnosis code indicating prenatal care, claims bearing a diagnosis code indicating a birth (for children) or a delivery (for women), claims for children up to 1 month of age and claims for children from 1 month to 1 year of age
Savings	Number of reduced births accountable to the provision of family planning services to women 1 year postpartum times the cost of care

Results

Table 3 provides the costs for delivery and birth and the first year of life from 2000 through 2014. The average cost for the mother in 2014 was \$7,733, while the average cost for the birth and first year of life for the child in 2014 was \$7,562. This results in \$15,295 savings for each averted birth in 2014.

Table 3. Average Medicaid costs for delivery and birth through 1st year of life, 2000–2014

Year	Delivery	Birth through 1st year of life	Total
2000		\$5,245	
2001	\$4,593	\$4,938	\$9,531
2002	\$4,771	\$5,472	\$10,243
2003	\$4,750	\$4,975	\$9,725
2004	\$4,906	\$5,662	\$10,568
2005	\$5,228	\$5,256	\$10,484
2006	\$5,656	\$5,962	\$11,618
2007	\$6,068	\$6,656	\$12,724
2008	\$6,240	\$6,772	\$13,012
2009	\$6,890	\$6,505	\$13,395
2010	\$6,998	\$7,031	\$14,029
2011	\$7,412	\$7,046	\$14,458
2012	\$8,059	\$7,544	\$15,603
2013	\$8,049	\$7,841	\$15,890
2014	\$ 7,733	\$7,562	\$ 15,295

To determine the reductions in costs from the demonstration, the Medicaid average costs for delivery and birth through first year of life were multiplied by the midpoint estimates of averted births. The total savings from the demonstration due to averted costs associated with delivery and birth through first year of life were over \$281 million through December 2014 (Table 4). It is important to remember that these savings estimates do not include continuing costs for children who remain on Medicaid past their first birthday.

Approximately 40% of children who had a Medicaid paid birth will remain on Medicaid five or more years.

Table 4. Savings associated with averted births, 2007–2014

Year	Averted births	Delivery cost	Birth and first year of life costs	Estimated savings due to averted births
2007	260	\$6,068	\$6,656	\$3,308,240
2008	969	\$6,240	\$6,772	\$12,608,628
2009	1371	\$6,890	\$6,505	\$18,364,545
2010	1907	\$6,998	\$7,031	\$26,760,931
2011	2610	\$7,412	\$7,046	\$37,787,580
2012	3293	\$8,059	\$7,544	\$51,380,679
2013	3713	\$8,049	\$7,841	\$58,999,570
2014	4723	\$7,733	\$7,562	\$72,238,285

Table 5 provides estimates of the net savings to Medicaid resulting from the family planning demonstration using the midpoint estimates. It is difficult to provide exact net savings numbers; however, the true value most likely lies near the midpoint. Over the five years of the original demonstration period and the first two years of the extension period, an estimated \$209 million saved through an investment of \$72 million for a return of \$2.91 for every dollar spent.

Table 5. Net savings in Medicaid costs due to the family planning demonstration program, 2006-2014

Year	Total costs averted	FP service costs	Net savings
2006	\$0	\$ 5,192,124	(\$5,192,124)
2007	\$3,308,240	\$ 6,931,922	(\$3,623,682)
2008	\$12,608,628	\$ 8,649,314	\$3,959,314
2009	\$18,364,545	\$ 9,494,280	\$8,870,265
2010	\$26,760,931	\$ 9,206,530	\$17,554,401
2011	\$37,787,580	\$ 8,568,748	\$29,218,832
2012	\$51,380,679	\$ 9,717,669	\$41,663,010
2013	\$58,999,570	\$ 8,627,444	\$50,372,126
2014	\$72,238,285	\$ 5,674,214	\$66,564,071
Total	\$281,448,458	\$ 72,062,245	\$209,386,213

While the extrapolation method provided reasonable estimates of averted births and savings for the first few years after the implementation of the program, the continued use of this model for the long term becomes increasingly difficult. If the lower estimates of averted births were used instead of the midpoint estimates, then the estimated total costs averted would be nearly \$178 million, yielding a net savings of \$105 million, and a return of \$1.47 for every dollar spent.

In order for the program to reach economic parity, the expense of \$8.2 million spent on family planning services in 2014 would have needed to avert a total of 371 births, for the roughly 258,000 months of family planning services provided. This equates to averting one births per 695 months provided. The absence of access to family planning services would have surely resulted in more than one birth per 695 months of services, ensuring the cost-effectiveness of the program.