November 2014

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 containes 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. The final report for the evaluation of the first 5 years of the waiver program indicated 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.

2. The repeat birth rates for women accessing family planning services have dropped for most age groups with large decreases among teens.

3. Reductions in Medicaid costs for deliveries and birth and first year of life are over $50 million.

4. Net Medicaid savings are well over $10 million from this demonstration.

Evaluation

The evaluation plan for the extension will mirror the previous work very closely with adjustments for changes in the objectives as reflected above. In particular, we will 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 other evaluation teams. 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, 2013. The data are housed within the Research Computing Center, a unit of the Dental Informatics Department of the College of Dentistry at The University of Iowa. The following protocols clarify the methods and 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

Figures 1 and 2 show the enrollment levels for women and men during calendar years 2010–2013. 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.

Figure 1. Women Enrolled in FPD by month, CY 2010–2013

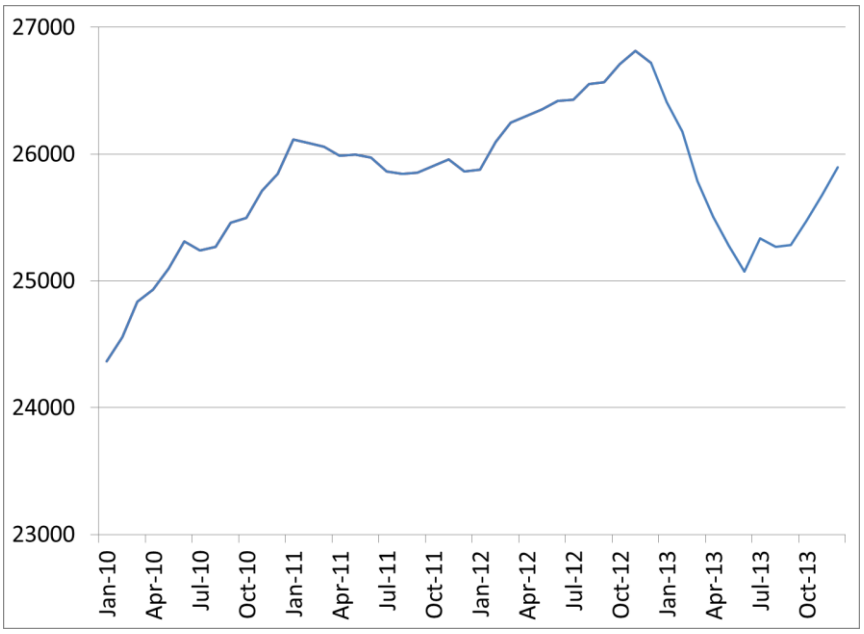
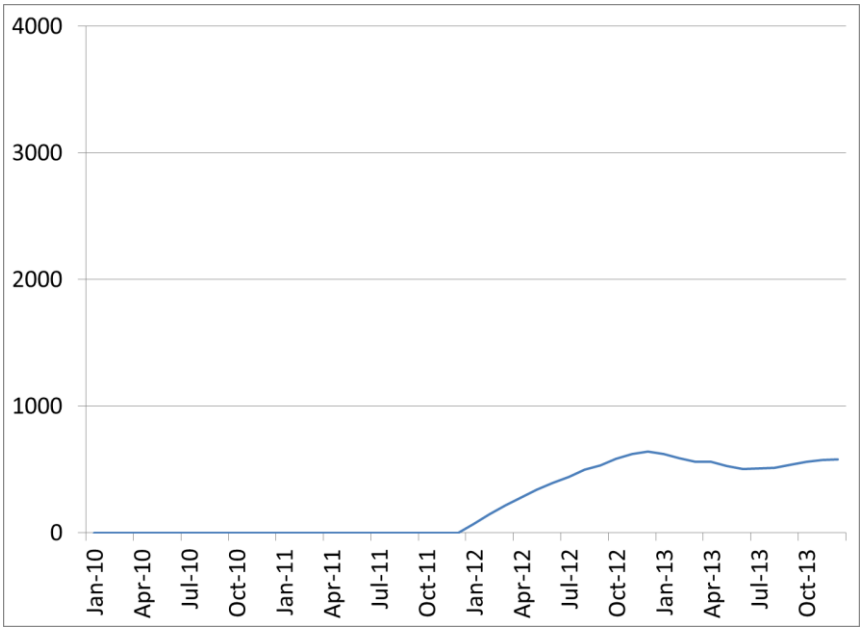


Figure 2. Men Enrolled in FPD by month, CY 2010–2013



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	2006–2013
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 and peaking at $9,717,669 in calendar year 2012. The total cost for calendar year 2013 was approximately one and a half million dollars lower than the previous year. The cost for men's family planning services in 2012 was $88,161, with a PMPM cost of $18.47. While the cost for men's family planning services in 2013 was $79,693, with a PMPM cost of $12.00.

The number of women served through the family planning program remains relatively stable with minimal increases from month to month. Very few men have been served through the program to date.

Table 1. Cost of female family planning services, 2006–2013

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	$ 8,231,171	$ 26.80	$ 321.58

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. For this project we will utilize a similar approach changing the outcome to number of months since previous birth, not whether or not a birth had occurred in the 24 months window.

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	2012–2013
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 in the first year of the extension.

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	2007–2013
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 3 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

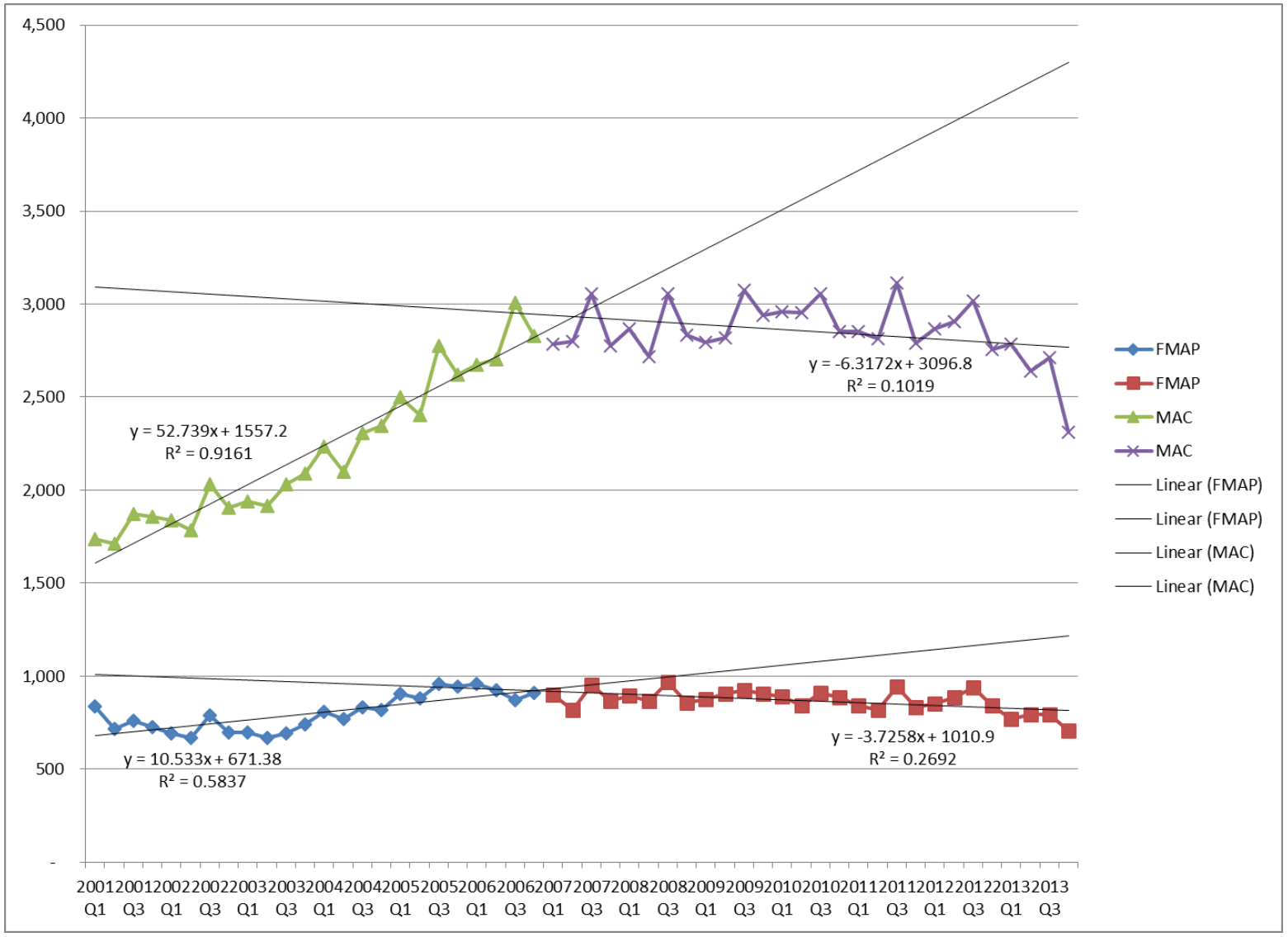
fertility rates after the program. Subtracting the "after program" slope from the "before program" slope provides a number of averted births.

According to these methodologies, from 9,037 to 17,715 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, 2007–2013

Year	Upper	Midpoint	Lower
2007	590	406	223
2008	1535	1057	579
2009	2480	1707	935
2010	3425	2358	1291
2011	4370	3008	1647
2012	5315	3659	2003
2013	6259	4309	2359
Total	17715	12195	9037

Figure 3. Numbers of deliveries by quarter, 2001–2013



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 1year of age enrolled in Medicaid
Measurement years	2007–2013
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 2013. The average cost for the mother in 2013 was $8,049, while the average cost for the birth and first year of life for the child in 2013 was $7,841. This results in $15,890 savings for each averted birth in 2013.

Table 3. Average Medicaid costs for delivery and birth through 1st year of life, 2000–2013

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

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 $240 million through December 2013 (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, 2007–2013

Year	Averted births	Delivery cost	Birth and first year of life costs	Estimated savings due to averted births
2007	406	$6,068	$6,656	$5,165,944
2008	1057	$6,240	$6,772	$13,753,684
2009	1707	$6,890	$6,505	$22,865,265
2010	2358	$6,998	$7,031	$33,080,382
2011	3008	$7,412	$7,046	$43,489,664
2012	3659	$8,059	$7,544	$57,091,377
2013	4309	$8,049	$7,841	$68,470,010

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 $177 million saved through an investment of $66 million for a return of $2.70 for every dollar spent.

Table 5. Net savings in Medicaid costs due to the family planning demonstration program

Year	Total costs averted	FP service costs	Net savings
2006	$0	$5,192,124	($5,192,124)
2007	$5,165,944	$6,931,922	($1,765,978)
2008	$13,753,684	$8,649,314	$5,104,370
2009	$22,865,265	$9,494,280	$13,370,985
2010	$33,080,382	$9,206,530	$23,873,852
2011	$43,489,664	$8,568,748	$34,920,916
2012	$57,091,377	$9,717,669	$47,373,708
2013	$68,470,010	$8,231,171	$60,238,839
Total	$243,916,326	$65,991,758	$177,924,568

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 $133.5 million, yielding a net savings of $67.5 million, and a return of $1.02 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 2013 would have needed to avert a total of 518 births from among the roughly 25,000 women receiving these services. This equates to averting two births per 100 women served. The absence of access to family planning services to these women would have surely resulted in more than two births per 100 women, ensuring the cost-effectiveness of the program.