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Iowa Family Planning Demonstration Evaluation. Final Report

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Final Report

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Executive Summary

Family Planning Demonstration

This demonstration provides access to family planning services for women with an income under 200% of poverty and for women who deliver a baby while in Medicaid who would normally lose their Medicaid enrollment 2 months postpartum. The demonstration pays for services provided by family planning clinics in addition to Medicaid providers.

Evaluation

The University of Iowa contracts with the Iowa Department of Human Services to provide the evaluation of the Family Planning Demonstration. Analyses were performed to determine the effect of the demonstration on utilization of family planning services, number of Medicaid births, and Medicaid costs and savings.

Successes

- The demonstration has increased the numbers of women receiving family planning services within the Medicaid program. Over 65,000 women have accessed family planning services through this demonstration.
- The repeat birth rates for women accessing FPD services have dropped for most age groups with large decreases among teens.
- Reductions in Medicaid costs for deliveries and birth and first year of life are over $50 million.
- Net Medicaid savings are well over $10 million from this demonstration.

Opportunities for improvement

- Automatic enrollment of women who are being disenrolled from Medicaid 2 months after delivery was activated in September of 2010. This was one of the original goals of the program and is anticipated to increase the numbers of women receiving FPD services in the future.
- Future analyses of savings due to the demonstration should include 1) estimates of savings in the future due to current FPD services, 2) estimates of costs for children beyond the first year of life, and 3) estimates of additional costs of government programs beyond Medicaid.

Introduction

The Iowa Department of Human Services (IDHS) contracts with The University of Iowa Public Policy Center (PPC) to provide an evaluation of the Medicaid Family Planning Demonstration (herein referred to as Family Planning Demonstration or FPD). Iowa implemented the FPD on February 1, 2006. The demonstration provides access to family planning services for women with an income under 200% of poverty and for women who deliver a baby while in Medicaid who would normally lose their Medicaid enrollment 2 months postpartum (MAC). The demonstration pays for services provided by family planning clinics in addition to Medicaid providers. The purpose of the demonstration is to avert births, particularly repeat births defined as any birth occurring within 24 months of a previous birth to the same woman. Budget neutrality is required by the Centers for Medicare and Medicaid (CMS), with the costs of family planning services offset by savings from averted births.

Data

Evaluation data are compiled from claims and enrollment files for the period January 1, 2001, through December 31, 2010. Claims files normally require a 6-month run out to assure that all paid claims for a specific period are included in the analyses. Therefore, the complete files for the fifth year of the project, ending January 31, 2011, will not be available until July 2011. The data are housed in the Research Computing Center, a unit of the Dental Informatics Department of the College of Dentistry at The University of Iowa.

In the current evaluation, a number of decisions have been made to clarify the methods and operationalize the variables and formulas needed to complete the analyses.

Year to allocate services - The services provided on a claim are counted within the measurement year if the first date of service occurred within the measurement year. 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 January 30, 2008, and discharged on February 3, 2008, will have the costs for delivery added to the total for the study year including January 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 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 women under 200% poverty – Sources to estimate the number of women within the state under 200% of poverty were investigated. There are no reliable estimates of women under 200% of poverty across the state for the evaluation period or the age groups of interest.

Enrollment

After the program was initiated, enrollment built rather quickly, going from 3,802 in the first month to 18,102 in the final month of the implementation year. Figure 1 provides the enrollment data from February 2006 through December 2010. The average monthly enrollment after the initial implementation period was 22,000 women. During the entire program period, 83,035 women were enrolled for at least one month; however, of these, only 68,046 (82%) had a claim for a family planning-related service.

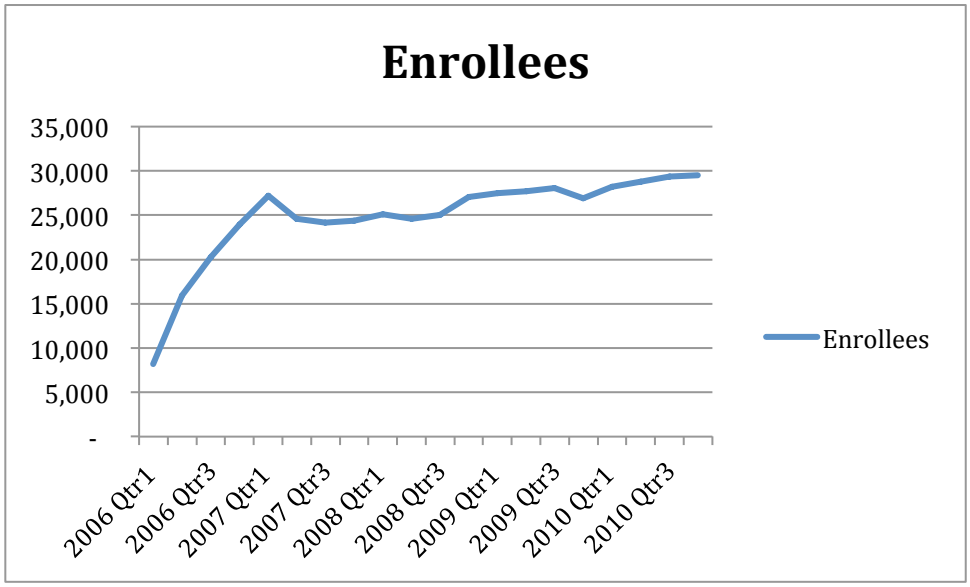

Figure 1. Enrollment in FPD by quarter, 2006-2010

Supplemental enrollment analyses

The population of women being served through the FPD changes from month to month, with approximately 1,500 women entering and leaving the program in any given month. Previous analyses provide information on how women enter the program and where they go when leaving the program. These results indicate that women generally stay in the demonstration, with only about 5% leaving in any given month (Table 1). It is interesting to note that about 2% of women enrolled in any month have been previously enrolled and then left the demonstration for some reason, only to return. Women who left the demonstration were most likely to leave the Medicaid program.

Only about 25% stay in Medicaid, transferring their enrollment to FMAP, MAC or IowaCare (Table 2). About 11% transferred to FMAP, 9% became MAC eligible, and 4% joined IowaCare.

Table 1. FPD Program Monthly Enrollment, 2006-2008

	Leaving from prior month	Continuing from prior month	New to FPD program	Return to FPD	Total enrolled
2006					
February	—	—	3,803	—	3,803
March	58	3,745	4,377	0	8,122
April	104	8,018	3,008	1	11,027
May	175	10,852	2,539	9	13,400
June	200	13,200	2,354	16	15,570
July	217	15,353	1,463	30	16,846
August	276	16,570	1,776	32	18,378
September	303	18,075	1,569	36	19,680
October	331	19,349	1,592	70	21,011
November	348	20,663	1,443	74	22,180
December	351	21,829	1,332	78	23,239
2007					
January	427	22,812	1,480	80	24,372
February	2,562	21,810	1,274	94	23,178
March	3,074	20,104	1,378	286	21,768
April	2,182	19,586	1,291	482	21,359
May	1,956	19,403	1,273	478	21,154
June	1,818	19,336	1,225	380	20,941
July	1,337	19,604	1,213	362	21,179
August	1,574	19,605	1,283	393	21,281
September	1,383	19,898	1,072	335	21,305
October	1,390	19,915	1,343	390	21,648
November	1,273	20,375	1,116	379	21,870
December	1,150	20,720	995	311	22,026
2008					
January	1,405	20,621	1,229	391	22,241
February	1,699	20,542	1,057	350	21,949
March	1,894	20,055	1,139	444	21,638
April	1,794	19,844	1,152	460	21,456
May	1,686	19,770	1,102	497	21,369
June	1,561	19,808	1,154	508	21,470
July	1,216	20,254	1,152	509	21,915
August	441	21,474	1,068	472	23,014
September	508	22,506	1,126	452	24,084
October	1,659	22,425	1,204	458	24,087
November	1,468	22,619	1,013	491	24,123
December	1,319	22,804	1,046	461	24,311

Table 2. Post-month Enrollment of Women Leaving FPD Program, 2006-2008

	No program	308	370	372	37E	86E	920	Other	Total
2006									
February	—	—	—	—	—	—	—	—	—
March	9	18	0	2	2	12	12	3	58
April	16	35	0	5	5	19	23	1	104
May	28	41	1	9	11	48	35	2	175
June	39	59	1	9	16	30	42	4	200
July	37	69	0	17	6	35	48	5	217
August	45	78	1	30	16	31	69	6	276
September	65	87	3	24	17	35	71	1	303
October	52	114	1	18	27	30	76	13	331
November	76	91	1	25	18	50	82	5	348
December	83	94	3	17	11	35	101	7	351
2007									
January	64	117	4	28	24	48	125	17	427
February	2,231	113	1	17	23	49	111	17	2,562
March	2,717	121	2	26	15	52	130	11	3,074
April	1,840	121	5	22	13	35	136	10	2,182
May	1,629	125	3	20	18	51	99	11	1,956
June	1,468	147	5	23	15	49	94	17	1,818
July	973	149	5	24	20	50	111	5	1,337
August	1,096	219	6	21	34	57	131	10	1,574
September	985	181	3	30	18	52	103	11	1,383
October	992	151	3	25	24	53	137	5	1,390
November	921	135	1	28	21	53	100	14	1,273
December	822	121	1	26	28	42	100	10	1,150
2008									
January	988	146	4	37	24	53	138	15	1,405
February	1,338	135	6	26	17	57	109	11	1,699
March	1,520	160	3	22	14	48	118	9	1,894
April	1,416	147	4	19	31	48	118	11	1,794
May	1,295	167	2	23	29	61	105	4	1,686
June	1,184	161	1	26	23	45	116	5	1,561
July	822	138	4	39	34	60	108	11	1,216
August	38	160	4	19	18	73	119	10	441
September	63	170	3	33	35	55	133	16	508
October	1,174	167	4	35	28	85	157	9	1,659
November	1,019	185	7	34	20	85	112	6	1,468
December	928	153	6	33	11	61	117	10	1,319

Note: 308: FAM-MED-ASSIST-PGM; 370: FIP-TRANS-EXT-MCAID; 372: CHILD-MEDICAL-ASSIST; 37E: MED-NEEDY-FIP-RLATED; 86E: IACARE-FAMPLAN; 920: PREG-WOMEN-MAC.

Table 3 indicates that a little over 1,000 women per month join the FPD with no prior experience with the program. Among these women, approximately 67% joined the FPD without having been enrolled in any other program in the preceding month. About 23% of the new enrollees transferred from the MAC program, continuing their eligibility

to receive family planning services after the expiration of their post-partum period under MAC. An additional 5% transferred from the FMAP program.

Table 3. Prior-month Enrollment of Women New to FPD Program, 2006-2008

	No program	308	370	372	37E	86E	920	Other	Total
2006									
February	3,763	6	5	1	2	0	22	3	3,802
March	4,277	15	10	9	4	6	53	3	4,377
April	2,858	14	9	11	16	9	89	2	3,008
May	2,197	33	18	10	8	8	260	5	2,539
June	1,956	32	17	12	7	18	309	3	2,354
July	1,076	39	12	16	10	30	274	6	1,463
August	1,354	49	13	14	7	34	299	6	1,776
September	1,113	58	19	12	5	35	325	2	1,569
October	1,171	52	18	13	8	26	303	1	1,592
November	1,046	49	18	17	7	30	276	0	1,443
December	926	51	25	13	12	29	273	3	1,332
2007									
January	1,089	46	18	18	10	30	265	4	1,480
February	912	50	26	9	18	16	242	1	1,274
March	976	40	28	14	11	24	282	3	1,378
April	929	43	25	13	8	14	257	2	1,291
May	882	59	34	15	7	21	251	4	1,273
June	819	69	32	16	5	16	266	2	1,225
July	817	54	26	13	6	28	267	2	1,213
August	892	57	30	14	6	17	266	1	1,283
September	674	48	25	12	9	20	281	3	1,072
October	909	55	30	20	5	16	304	4	1,343
November	668	45	24	18	4	12	343	2	1,116
December	574	48	22	13	10	7	320	1	995
2008									
January	797	54	28	17	8	10	313	2	1,229
February	701	61	17	8	4	12	251	3	1,057
March	810	54	18	15	14	7	217	4	1,139
April	772	54	21	15	11	10	265	4	1,152
May	724	58	23	11	7	14	264	1	1,102
June	760	57	21	16	7	16	273	4	1,154
July	821	60	19	15	7	4	226	0	1,152
August	739	46	12	15	7	8	240	1	1,068
September	773	65	20	12	6	11	239	0	1,126
October	806	71	23	12	5	22	261	4	1,204
November	619	52	18	19	5	20	278	2	1,013
December	641	61	28	11	7	21	273	4	1,046

Note: 308: FAM-MED-ASSIST-PGM; 370: FIP-TRANS-EXT-MCAID; 372: CHILD-MEDICAL-ASSIST; 37E: MED-NEEDY-FIP-RLATED; 86E: IACARE-FAMPLAN; 920: PREG-WOMEN-MAC

Around 400 to 500 women per month rejoin the FPD program after some period of absence as indicated in Table 4. The majority of those rejoining the program were not

enrolled in any program in the month prior to rejoining the FPD. An additional 16% transferred eligibility from the MAC program and 10% from FMAP.

Table 4. Prior-month Enrollment of Women Returning to FPD Program, 2006-2008

	No program	308	370	372	37E	86E	920	Other	Total
2006									
February	—	—	—	—	—	—	—	—	—
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	1	0	0	0	1
May	1	5	0	1	0	0	1	1	9
June	2	8	0	1	4	0	1	0	16
July	1	10	1	0	7	3	7	1	30
August	2	10	0	4	8	6	1	1	32
September	0	14	0	3	0	16	2	1	36
October	2	28	2	5	8	16	8	1	70
November	2	31	1	4	7	16	10	3	74
December	4	26	1	10	14	12	6	5	78
2007									
January	5	25	3	5	14	15	12	1	80
February	5	19	4	12	18	12	16	8	94
March	207	27	5	6	10	15	14	2	286
April	397	29	2	9	13	12	17	3	482
May	385	28	2	6	15	13	24	5	478
June	290	29	5	3	14	16	21	2	380
July	268	31	2	7	8	15	30	1	362
August	270	36	4	11	11	24	33	4	393
September	205	40	3	8	12	18	49	0	335
October	254	41	3	9	19	16	45	3	390
November	233	55	1	10	10	17	49	4	379
December	160	44	7	7	26	14	51	2	311
2008									
January	258	38	5	8	18	10	51	3	391
February	210	28	5	8	13	15	69	2	350
March	311	44	4	5	11	8	59	2	444
April	311	44	7	13	11	13	57	4	460
May	357	41	4	12	16	16	50	1	497
June	336	41	6	11	18	12	82	2	508
July	362	45	6	8	20	3	64	1	509
August	298	39	7	13	22	9	82	2	472
September	241	53	8	9	22	28	89	2	452
October	226	62	7	13	14	26	107	3	458
November	239	63	9	16	22	45	96	1	491
December	239	46	13	12	21	29	100	1	461

Note: 308: FAM-MED-ASSIST-PGM; 370: FIP-TRANS-EXT-MCAID; 372: CHILD-MEDICAL-ASSIST; 37E: MED-NEEDY-FIP-RLATED; 86E: IACARE-FAMPLAN; 920: PREG-WOMEN-MAC

Since December 2006 the percentage of women joining (or rejoining) the FPD program in any given month who will remain eligible for at least 12 months is about 70%, and

the average time enrolled over the first year is a little over 10 months (See Table 5). So for example, among women newly enrolled in the FPD for the first time in January 2008, 70.9% were eligible under FPD for the entire period January-December 2008.

Table 5. First-Year Coverage of New and Returning FPD Enrollees, 2006-2008

	Average number of months enrolled in first 12 months from initial enrollment			**Percent enrolled for all first 12 months from initial enrollment**		
	New to FPD program	Returning to FPD program	Total new for month	New to FPD program	Returning to FPD program	Total new for month
2006						
February	11.3	—	11.3	87.7%	—	87.7%
March	11.3	*	11.3	86.6%	*	86.6%
April	11.1	*	11.1	84.0%	*	84.0%
May	11.1	*	11.1	83.0%	*	82.8%
June	11.0	*	11.0	81.1%	*	80.7%
July	10.9	*	10.8	78.7%	*	77.3%
August	10.8	*	10.8	77.7%	*	76.8%
September	10.7	*	10.6	75.7%	*	74.3%
October	10.8	*	10.6	75.3%	*	72.9%
November	10.7	*	10.5	74.9%	*	72.1%
December	10.4	*	10.2	72.1%	*	69.9%
2007						
January	10.6	*	10.3	73.9%	*	70.6%
February	10.5	*	10.1	73.6%	*	69.7%
March	10.4	9.5	10.2	71.8%	66.4%	70.9%
April	10.4	10.3	10.4	72.4%	76.8%	73.6%
May	10.3	10.6	10.4	70.9%	77.8%	72.8%
June	10.0	10.6	10.2	69.0%	77.1%	70.9%
July	10.2	10.2	10.2	69.6%	72.4%	70.2%
August	10.4	10.1	10.3	72.6%	69.2%	71.8%
September	10.3	9.7	10.2	72.8%	64.5%	70.8%
October	10.4	9.7	10.2	72.9%	63.6%	70.8%
November	10.4	9.7	10.2	71.0%	66.8%	69.9%
December	10.4	9.4	10.1	72.6%	61.7%	70.0%
2008						
January	10.4	9.9	10.3	70.9%	68.8%	70.4%

* The number returning to FPD program in these months is very low and the estimates for these months are subject to high estimation errors.

The enrollment history of those leaving the FPD program is presented in Table 6. Among the 1,319 women who left the program in December 2008 (i.e. were enrolled in November but not in December), 67.5% had been enrolled for 12 months or longer—for an average of 11.7 months.

Table 6. Length of Enrollment of Women Leaving FPD Program, 2006-2008

	Average number of months enrolled prior to leaving	Percent enrolled for 12 months or longer	Total number leaving from prior month
2006			
March	1.0	0.0%	58
April	1.4	0.0%	104
May	1.9	0.0%	175
June	2.5	0.0%	200
July	3.1	0.0%	217
August	3.4	0.0%	276
September	4.2	0.0%	303
October	4.5	0.0%	331
November	5.2	0.0%	348
December	5.4	0.0%	351
2007			
January	5.8	0.0%	427
February	10.9	82.2%	2,562
March	11.0	84.2%	3,074
April	10.7	78.6%	2,182
May	10.4	75.7%	1,956
June	10.3	74.4%	1,818
July	9.7	63.8%	1,337
August	9.8	64.7%	1,574
September	9.7	64.5%	1,383
October	10.0	65.2%	1,390
November	10.0	65.7%	1,273
December	10.0	65.8%	1,150
2008			
January	10.4	65.1%	1,405
February	14.3	74.4%	1,699
March	14.2	75.3%	1,894
April	13.3	74.0%	1,794
May	12.6	72.1%	1,686
June	12.6	71.5%	1,561
July	11.1	65.0%	1,216
August	7.3	18.8%	441
September	8.4	24.0%	508
October	11.9	67.4%	1,659
November	11.5	65.3%	1,468
December	11.7	67.5%	1,319

Results

Family planning services

Hypothesis 1: The demonstration waiver will result in an increase in the annual proportion of clients receiving Medicaid-paid family planning services in Iowa.

To address this hypothesis we tracked the number of women within the eligible population who had 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 between the ages of 13 and 44 who were enrolled in Medicaid for at least one month during the measurement year
- **Measurement years** - 2003-20010
- **Measure** - Costs per member month for women within the demonstration

Results

The costs for family planning services to women in the demonstration are shown in Table 7. Costs for 2010 are estimated based on claims processed through February 2011. Actual costs rose from $5,192,048 to $9,485,797 over the first four years of the program, an 83% increase.

The number of women served through the family planning program remains relatively stable, with minimal increases from month to month. Though the program has never served the number of women originally estimated, the costs of the program are as expected. Per member per month costs are higher than expected.

Table 7. Cost of family planning services, 2006-2010

Costs	2006	2007	2008	2009	2010 (est.)
Total cost	$5,192,048	$6,931,919	$8,653,428	$9,485,797	$9,991,726
Per member per month	$29.97	$26.45	$31.85	$32.98	$33.08
Per year	$359.61	$317.40	$382.15	$395.75	$396.92

Repeat deliveries

Hypothesis 2: The proportion of women in the target population who experience repeat Medicaid deliveries will decline.

Women with access to family planning services for an extended time should be better equipped to avoid pregnancy, reducing the repeat birth rate in the demonstration

group. A repeat birth is defined as any birth within 24 months of a previous delivery. For these analyses, the repeat birth rate is calculated by identifying women with a delivery in the demonstration year and determining whether they delivered another child within a 24 month window. Due to the 24-month look-up window, the data is available through 2008.

- **Data Source** - Medicaid claims and enrollment files
- **Eligible population** - Women enrolled in Medicaid between the ages of 13 and 44 who had a delivery during the measurement year
- **Measurement years** - 2006-2008
- **Numerator** - Number of women in the eligible population with a repeat delivery in the 24 months following the first delivery
- **Denominator** - Number of women in the eligible population

Results

From 2006 to 2008 there were a total of 34,102 deliveries identified. For 5,608 of these deliveries, the mother was identified to have made a claim under the FPD program within 12 months of that delivery. Among those 5,608 cases, a total of 627 cases (11.2%) were identified as having another birth within 24 months of the first identified delivery. This is compared with the 28,494 deliveries for which the mother did not make a FPD claim within 12 months of delivery, which resulted in 4,304 deliveries (15.1%) within the ensuing 24-month period. The repeat birth rate for MAC women who did not have a FPD claim within 12 months was 15.1% compared to 11.2% among those who had made a FPW claim. This pattern is consistent across all age groups (see Table 8), except for women 35-44 years of age. In this group, the repeat birth rate is higher for women utilizing FPD services.

Table 8. Repeat birth rates by age, 2006-2008

Age	No FPD claim	Had FPD claim
13-17	20%	11%
18-21	21%	13%
22-33	13%	10%
34-44	8%	11%
Overall	15%	11%

Supplemental results

In a previous report the rate of repeat births during the baseline period, 2001-2005, was provided by program type. Table 9 provides these results to allow a comparison to the data above. The average repeat birth rates for women in CMAP (teens) over the 4 year period prior to the demonstration averaged 22%, comparable to the 20-21% found during the demonstration period for women who did not access FPD services. This makes the rate for women accessing FPD services all the more striking with nearly a

50% drop in repeat birth rates for women in the youngest group and over 35% drop for women in the second youngest group.

Table 9. Number of repeat births for women enrolled in Medicaid by program prior to FPD, 2001-2005

Year	Total births for year	Number of repeat births	Repeat birth rate
FMAP			
2001	2,951	369	12.5%
2002	2,828	381	13.5%
2003	2,732	386	14.1%
2004	3,216	503	15.6%
2005	3,686	594	16.1%
CMAP			
2001	454	77	17.0%
2002	480	87	18.1%
2003	486	117	24.1%
2004	439	96	21.9%
2005	608	165	27.1%
MAC			
2001	6,828	742	10.9%
2002	7,445	900	12.1%
2003	7,792	1,016	13.0%
2004	8,961	1,236	13.8%
2005	10,292	1,469	14.3%

Medicaid deliveries

Hypothesis 3: The demonstration will result in a decrease in the annual rate of Medicaid paid deliveries in Iowa.

Providing 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. As the annual rate of deliveries decreases, we would also expect that the annual rate of growth in deliveries would decrease.

- **Data Source** - Medicaid claims and enrollment files
- **Eligible population** - Women enrolled in Medicaid between the ages of 13 and 44 who had a delivery during the measurement year
- **Measurement years** - 2003-2010
- **Count of deliveries** - A count of all deliveries regardless of outcome

Results

Figure 2 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 the number of averted births.

According to these methodologies, from 2,366 to 5,858 births were averted during the five years of the demonstration. Since the effects of family planning services are offset by nine months, additional births will be averted during 2011 that are not included in these estimates. Table 10 provides the number of averted births by year using the upper and lower bound estimations and providing a midpoint.

Table 10. Estimation of averted births, upper, midpoint, and lower bound estimates, 2007-2010

	Averted Births		
Year	Upper	Midpoint	Lower
2007	431	303	174
2008	1,120	786	452
2009	1,809	1,270	731
2010	2,498	1,754	1,009
Total	5,858	4,112	2,366

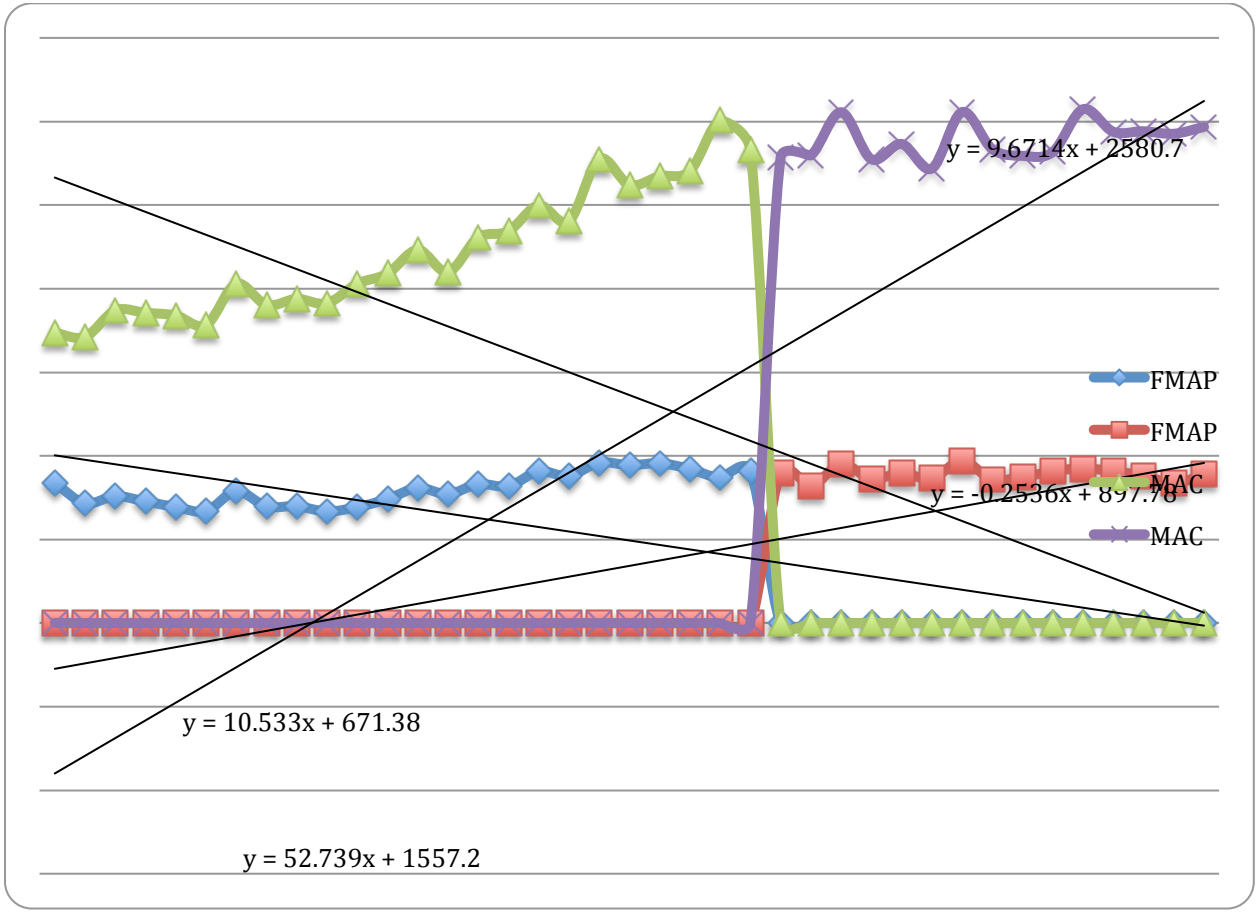

Figure 2. Numbers of deliveries by quarter, 2001-2010

Hypothesis 4: A decrease in Medicaid paid deliveries in Iowa will result in a decrease in annual expenditures for prenatal, birth, newborn, and infant care expenditures.

Costs are divided into 2 categories: mother and child. The mother's costs include prenatal care and delivery. The child's costs include birth through 1st year of life.

- **Data Source** - Medicaid claims files
- **Eligible population** - Women enrolled in Medicaid between the ages of 13 and 44 and children enrolled in Medicaid from birth through 1st year of life
- **Measurement years** - 2003-2010
- **Cost of care-mother** - Medicaid costs associated with claims bearing a diagnosis code indicating prenatal care or delivery for women in the eligible population for the measurement year
- **Cost of care-child** - Medicaid costs associated with claims bearing a diagnosis code indicating birth, infant care or care during first 1st year of life

Results

Table 11 provides the costs for delivery and birth and the 1st year of life from 2000 through 2010. The average cost for the mother in 2009 was $6,904, while the average for cost for the birth and first year of life for the child in 2009 was $6,531. This results in $13,435 savings for each averted birth in 2009. This cost is estimated to be $13,386 in 2010.

Table 11. Average Medicaid costs for delivery and birth through 1st year of life, 2000-2010

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	$6,244	$6,772	$13,016
2009	$6,904	$6,531	$13,435
2010	$6,906	$6,480*	$13,386*

*Estimated

To determine the reductions in costs from the demonstration, the Medicaid average costs for delivery and birth through 1st 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 1st year of life were over $54 million. This does not include savings associated with births averted in 2011 due to FPD services accessed in 2010. Nor do the savings estimates include continuing costs for children who remain on Medicaid past their first birthday. Approximately 40% of children will remain on Medicaid five or more years.

These savings also do not include the averted costs associated with WIC, low cost housing, and other governmental support for women and children in poverty. Had these costs been included, the savings would be substantially increased. For a more complete discussion of other associated costs see "The Cost of Unintended Pregnancy in Iowa: A Benefit-Cost Analysis of Public Funded Family Planning Services" on the web at http://ir.uiowa.edu/ppc_health/48/.

Table 12. Savings associated with averted births, 2007-2010

Year	Averted births	Delivery cost	Birth and first year of life costs	Estimated savings due to averted births
2007	303	$6,068	$6,656	$3,855,372
2008	786	$6,244	$6,772	$10,230,576
2009	1,270	$6,904	$6,531	$17,062,450
2010	1,754	$6,906	$6,480*	$23,568,498
Total	4,112			$54,716,896

Net savings

Hypothesis 5: The demonstration waiver will produce a net annual savings in State and Federal Medicaid expenditures for birth-related services.

To determine the savings from averted births the number of births per quarter are plotted to determine whether and how the trend line has changed during the time 5 years prior to the program and for the 5 years since the program began.

- **Data Source** - Medicaid claims and enrollment files
- **Eligible population -** Women in Medicaid
- **Measurement years** - 2006-2010
- **Births averted -** The plot lines and resulting formulas provide this estimate
- **Average costs -** Cost of care for mother and child combined

Results

Table 13 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.

Table 13. Net savings in Medicaid costs due to the family planning demonstration program

Year	Total costs averted	FP service costs	Net savings
2006	$0	$5,192,048	-$5,192,048
2007	$3,855,372	$6,931,919	-$3,076,547
2008	$10,230,576	$8,653,428	$1,577,148
2009	$17,062,450	$9,485,797	$7,576,653
2010	$23,568,498	$9,991,726*	$13,576,772
Total	$54,716,896	$30,263,192	$14,461,978

*Estimated from 11 months of claims.

Primary care utilization

Hypothesis 6: The demonstration waiver will result in an increased awareness of the primary care services available at FQHCs/RHCs.

The family planning demonstration has as one of its goals to increase the use of FQHCs and RHCs through primary care referrals from family planning providers. This hypothesis was not addressed. The evaluation funding was insufficient for this purpose.

Conclusions

Successes

- The demonstration has increased the numbers of women receiving family planning services within the Medicaid program. Over 65,000 women have accessed family planning services through this demonstration.
- The repeat birth rates for women accessing FPD services have dropped for most age groups, with large decreases among teens.
- Reductions in Medicaid costs for deliveries and birth and first year of life are over $50 million.
- Net Medicaid savings are well over $10 million from this demonstration.

Opportunities for improvement

- Automatic enrollment of women who are being disenrolled from Medicaid 2 months after delivery was activated in September of 2010. This was one of the original goals of the program and is anticipated to increase the numbers of women receiving FPD services in the future. An increase in the number of women enrolled in the program would increase the cost of providing family planning services, but it should also increase the number of averted births. With the current cost structure, 1 averted birth results in enough savings to provide family planning services to 33 women.
- Future analyses of savings due to the demonstration should include: 1) estimates of savings in the future due to current FPD services, 2) estimates of costs for children beyond the first year of life, and 3) estimates of additional costs of government programs beyond Medicaid.