1115 WAIVER EVALUATION: MANDATORY COST SHARING FOR CHILDLESS ADULTS

October 5, 2016

Background:

AHCCCS through a State Plan Amendment (SPA), implemented cost sharing for non-exempted populations as authorized under the Deficit Reduction Act (DRA) (§§ 1916 and 1916A of the Social Security Act) as of July 1, 2010. AHCCCS received final approval for its most recent 1115 waiver containing cost sharing provisions which applied similar mandatory copayments on the childless adult population from CMS on October 21, 2011. The mandatory copayments in the waiver proposal were in place until 2013. The copays included in the waiver can be seen in the table below.

Table-1: Childless Adults Copays

Service	**Copayment Amount**	**Geographic Applicability**
Generic prescription, or brand name prescription if generic is not available	$4	Statewide
Brand name prescription when generic is available	$10	Statewide
Non-emergency use of the emergency room	$30	Statewide
Physician office visit	$5	Statewide
Non-emergency medical transportation (NEMT) (taxi rides only)	$2 per trip ($4 roundtrip maximum)	Only in Maricopa and Pima counties

Objective:

As written in the Medicaid section 1115 demonstration waiver, an evaluation of the mandatory copays for Childless Adults was conducted. The objective of this evaluation was to examine the effect of mandatory copays for the Childless Adult population on appropriate utilization of services. Specifically, the following hypotheses were tested to assess the program's success:

1. Quality of Care: Implementing mandatory copays on the Childless Adult population will improve use of services related to chronic disease management and brand and generic medication selection.
    1.1. The relative use of office visits for ongoing asthma care for Adults without Dependent Children will be similar to that of TANF Adults.
    1.2. The relative use of office visits for ongoing diabetes care for Adults without Dependent Children will be similar to that of TANF Adults.
    1.3. The relative use of brand name medications by Adults without Dependent Children will not change as a result of implementation of mandatory copayment.
2. Access to Care: The implementation of mandatory copays on the Childless Adult population will not result in an increase in the use of the emergency room.
    2.1. The implementation of mandatory copays on the Childless Adult population for non-emergency use of the emergency room will decrease utilization of non-emergency visits.

2.2. The relative use of inpatient services provided to the Adults without Dependent Children will not change as a result of implementation of mandatory copayments for office visits.

3. Access to Care: The implementation of mandatory copays on the Childless Adult population for non-emergency transportation will not adversely affect access to care.
   3.1. The relative access to care for Adults without Dependent Children in Maricopa and Pima counties who pay a transportation copayment will be similar to the relative access to care for Adults without Dependent Children in all counties excluding Maricopa and Pima.
   3.2. Implementing mandatory copays on non-emergency medical transportation for the Childless Adult population in Maricopa and Pima counties will not result in a decrease in the rate at which these members use provider office visits.

Methodology:

This study utilized the evaluation design method agreed upon by the State and CMS in the Final Evaluation Plan submitted on October 2011. The intervention group consisted of Adults without Dependent Children (Childless Adults), and the control group consisted of Adults in the Temporary Assistance for Needy Families (TANF) program enrolled in AHCCCS. It should be noted that the State raised concerns around using the TANF population as the control group, since (a) they are too distinct to achieve an appropriate comparison (e.g., they have a minor child in the home) and (b) enrollment for the childless adult population was frozen. Accordingly, the composition of the childless adult population was going to experience fluctuations related to the enrollment freeze, a factor not being experienced by the TANF parent population.

AHCCCS bio statisticians, certified professionals in health care quality and quality improvement specialists conducted a temporal analysis through the collection of both baseline and re-measurement data for specified performance measures listed **Table-2**. Changes from the previous measurement are described as increases or decreases only when analysis using the Pearson chi-square test yields a statistically significant value (p less than or equal to 0.05), that is the probability of obtaining such a difference by chance only is relatively low.

Table 2- Study Design

Hypothesis	Performance Measure	Target Population	Sampling Methodology	Data Source
1.1. *The relative use of office visits for ongoing asthma care for Adults without Dependent Children will be similar to that of TANF Adults.*	**Asthma** Effect of Adults Without Dependent Children mandatory copayments on utilization of the following service category: ▪ Routine and ongoing health care for childless adult members without	Target population: Adults Without Dependent Children who meet enrollment criteria and are diagnosed with asthma Control population: TANF Adults who meet enrollment criteria and are diagnosed with asthma	Members will be identified using the NCQA HEDIS methodology to identify individuals diagnosed with asthma. The NCQA HEDIS Access to Care Measure will be utilized to measure access to care.	Claims Encounters Enrollment

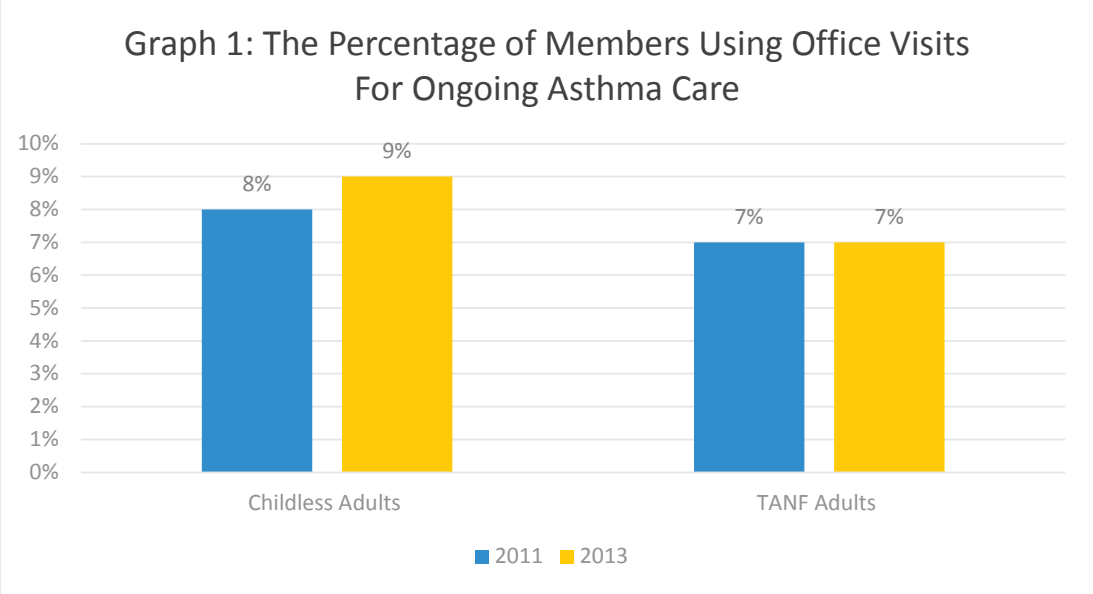
	children diagnosed with asthma			
1.2. *The relative use of office visits for ongoing diabetes care for Adults without Dependent Children will be similar to that of TANF Adults.*	**Diabetes** Effect of Adults Without Dependent Children mandatory copayments on utilization of the following service categories: ▪ Routine and ongoing health care for Adults Without Dependent Children diagnosed with diabetes	Target population: Adults Without Dependent Children who are diagnosed with diabetes Control population: TANF Adults who meet enrollment criteria and are diagnosed with diabetes	Members will be identified using the NCQA HEDIS methodology to identify individuals diagnosed with diabetes. The NCQA HEDIS Access to Care Measure will be utilized to measure access to care.	Claims Encounters Enrollment
1.3. *The relative use of brand name medications by Adults without Dependent Children will not change as a result of implementation of mandatory copayment.*	**Pharmacy** Effect of Adults Without Dependent Children mandatory copayments on utilization of the following service categories: Pharmacy utilization ▪ Brand name ▪ Generic	Target population: Adults Without Dependent Children Control Group population: TANF Adults	A sampling methodology will not be utilized for this measure.	Claims Encounters Enrollment
2.1 *The implementation of mandatory copays on the Childless Adult population for non-emergency use of the emergency room will decrease utilization of non-emergency visits.*	Effect of Adults Without Dependent Children mandatory copayments non-emergency use of the emergency room: ▪ ED visits per 1,000 members in the target population	Target population: Adults Without Dependent Children Control Group population: TANF Adults	A sampling methodology will not be utilized for the this measure.	Claims Encounters Enrollment
2.2 *The relative use of inpatient services provided to the Adults without Dependent Children will not change as a*	Effect of Adults Without Dependent Children mandatory copayments for office visits on utilization of the following service category:	Target population: Adults without Dependent Children Control Group population: TANF Adults	The National Committee for Quality Assurance (NCQA) Health Employer Data Information Set (HEDIS)® methodology, or the	Claims Encounters Enrollment

	result of implementation of mandatory copayments for office visits.	▪ Inpatient services		CMS Core Measure Set methodology if different, including the sampling methodology will be utilized for this measure. Adults Access to Preventive and Ambulatory Care Measure	
3.1	*The relative access to care for Adults without Dependent Children in Maricopa and Pima counties who pay a transportation copayment will be similar to the relative access to care for Adults without Dependent Children in all counties excluding Maricopa and Pima.*	Effect of Adults Without Dependent Children mandatory non-emergency transportation copayments on the utilization of the following service: ▪ Office visits	Target population: Adults without Dependent Children in Maricopa and Pima Counties Control Group population: Adults Without Dependent Children in all counties except Maricopa and Pima.	The National Committee for Quality Assurance (NCQA) Health Employer Data Information Set (HEDIS)® methodology, or the CMS Core Measure Set methodology if different, including the sampling methodology will be utilized for this measure.	Claims Encounters Enrollment
3.2	*Implementing mandatory copays on non-emergency medical transportation for the Childless Adult population in Maricopa and Pima counties will not result in a decrease in the rate at which these members use provider office visits.*	Effect of Adults Without Dependent Children mandatory non-emergency transportation copayments on the utilization of the following service: ▪ Office visits	Target population: Adults without Dependent Children in Maricopa and Pima Counties Control Group population: TANF Adults	The National Committee for Quality Assurance (NCQA) Health Employer Data Information Set (HEDIS)® methodology, or the CMS Core Measure Set methodology if different, including the sampling methodology will be utilized for this measure.	Claims Encounters Enrollment

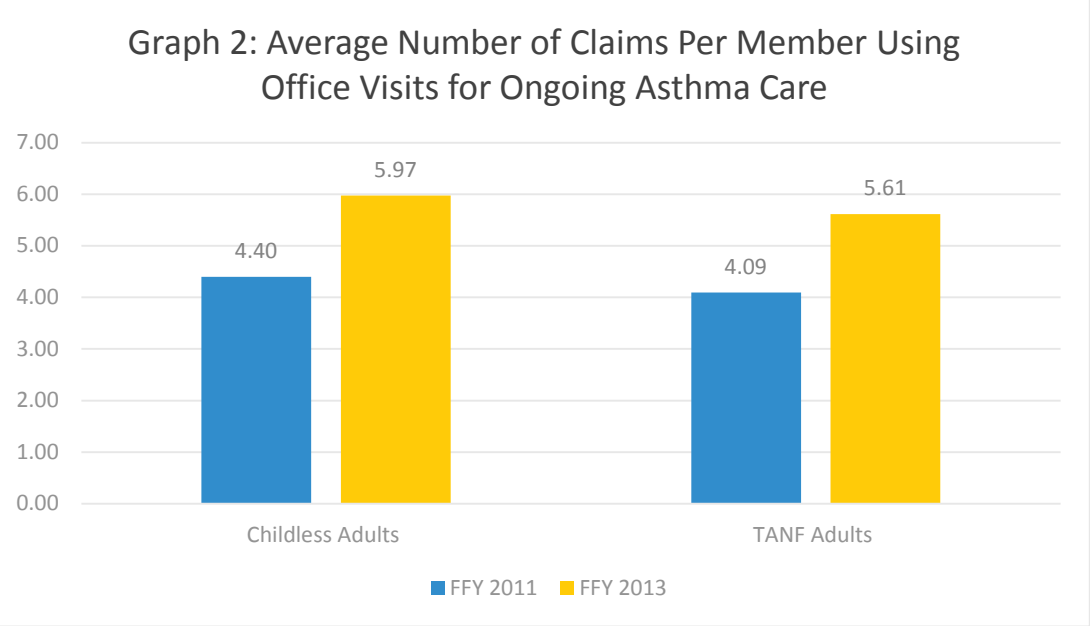
Results:

The relative use of office visits for ongoing asthma and diabetes care for Adults without Dependent Children improved during the evaluation period. The overall proportion of Childless Adult members utilizing office visits for ongoing asthma and diabetes care increased by 1% and 2% respectively from fiscal years 2011-2013. Furthermore, the rate of office visits made by Childless Adults for asthma and diabetes care management increased substantially during the evaluation period, as demonstrated by an upsurge in the average number of claims for these services. Childless Adult members utilizing office visits for ongoing asthma care increased by 36%, from 4.40 claims per utilizing member in FFY 2011 to 5.97 claims in FFY 2013. The average number of claims for diabetes office visits increased by 34%, from 13.27 claims per utilizing member in FFY 2011 to 17.78 claims per utilizing member in FFY 2013.

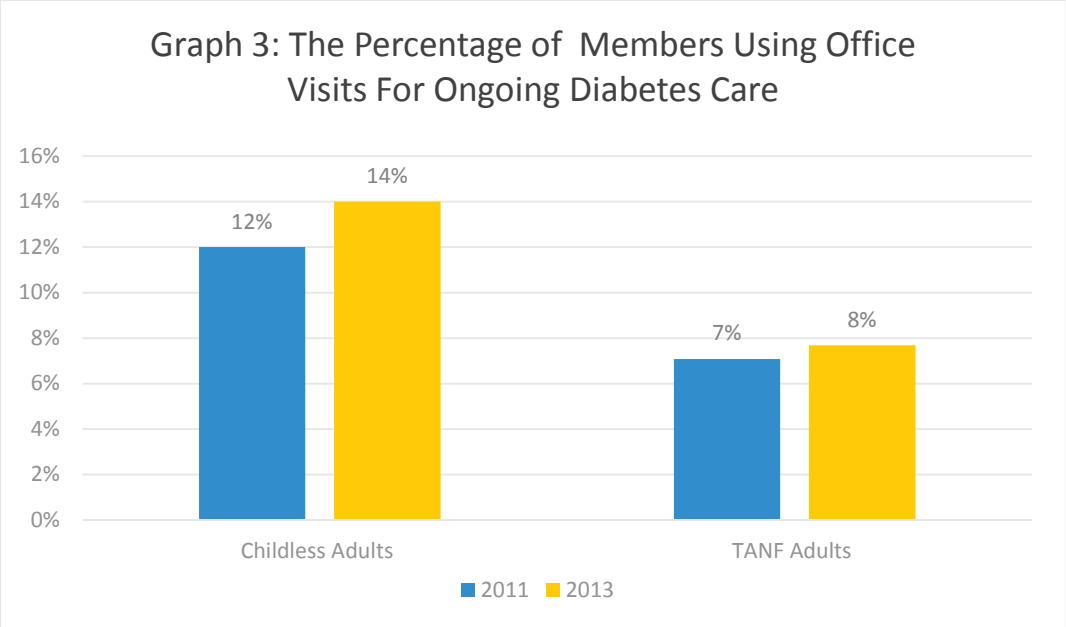
While the percentage of TANF adults receiving diabetes care during office visits increased by 1% in in FFY 2011-2013, no statically significant changes were observed in the percentage of TANF Adults using office visits for ongoing asthma care. Furthermore, like the Childless Adult population, the average claims per utilizing member for asthma and diabetes care services grew substantially for TANF Adults—37% and 34% respectively in FFY 2011-2013.



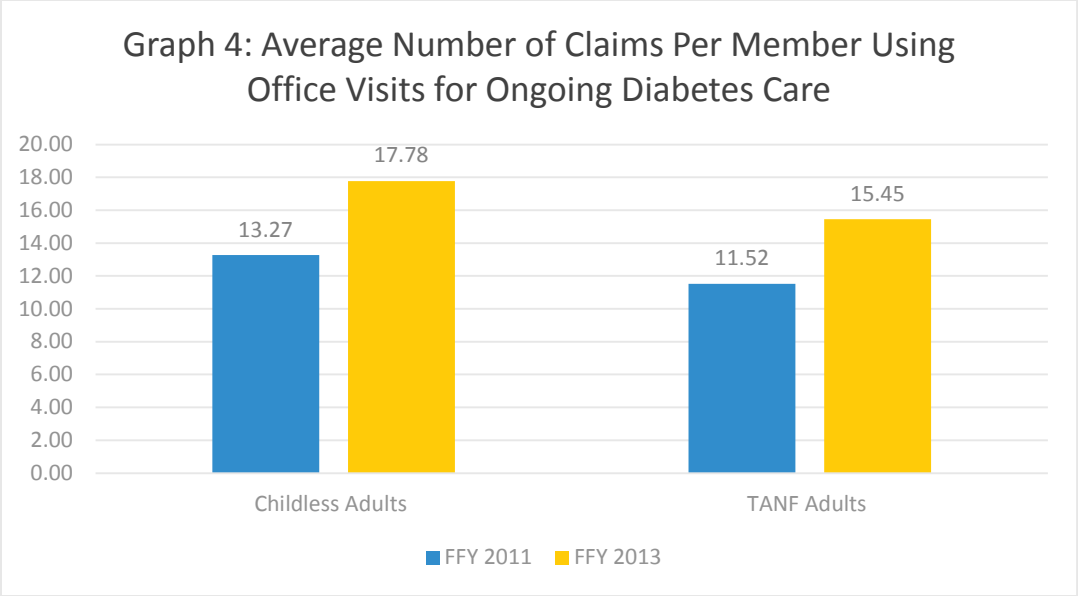
Enrollment Category	Year	Baseline Population	Number of Unique Members Using Office Visits for Ongoing Asthma Care	Percentage of Members Using Office Visits for Ongoing Asthma Care	Relative % Change from 2011 to 2013	Asymp. Sig
Childless Adults	FFY 2011	203,860	16,053	8%		
	FFY 2013	83,347	7,272	9%	1%	P<0.001
TANF Adults	FFY 2011	234,573	16,350	7%		
	FFY 2013	228,440	15,981	7%	0%	P=0.733



Enrollment Category	Federal Fiscal Year	Baseline Population	Number of Unique Members Using Office Visits for Ongoing Asthma Care	Total Number of Claims	Average Number of Claims Per Member Using Office Visits for Ongoing Asthma Care	Relative % Change from 2011 to 2013
Childless Adults	FFY 2011	203,860	16,053	70,604	4.40	
	FFY 2013	83,347	7,272	43,438	5.97	36%
TANF Adults	FFY 2011	234,573	16,350	66,917	4.09	
	FFY 2013	228,440	15,981	89,700	5.61	37%

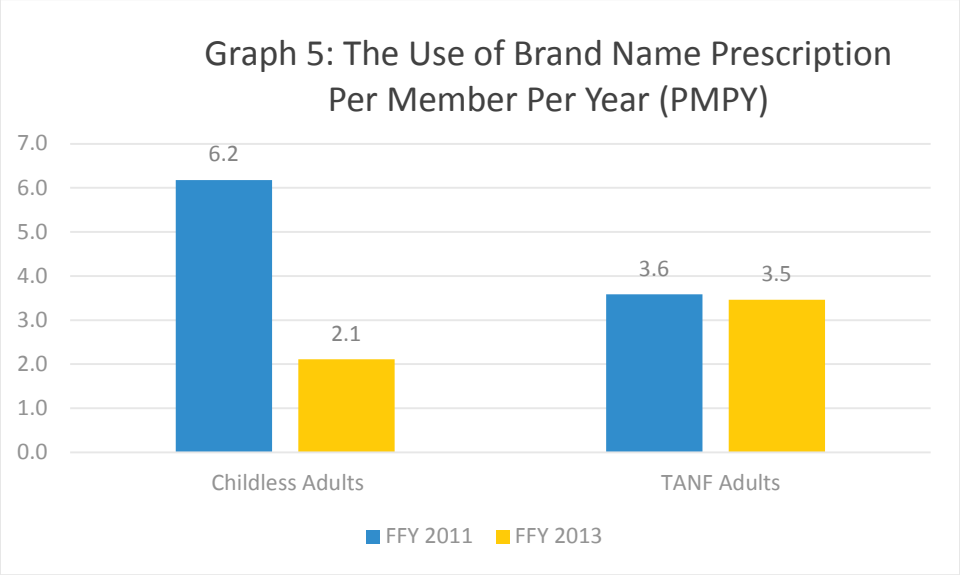


Enrollment Category	Year	Baseline Population	Number of Unique Members Using Office Visits for Ongoing Diabetes Care	Percentage of Members Using Office Visits for Ongoing Diabetes Care	Relative % Change from 2011 to 2013	Asymp. Sig
Childless Adults	FFY 2011	203,860	23,597	8%		
	FFY 2013	83,347	11,829	9%	1%	P<0.001
TANF Adults	FFY 2011	234,573	16,613	7%		
	FFY 2013	228,440	17,559	8%	1%	P<0.001

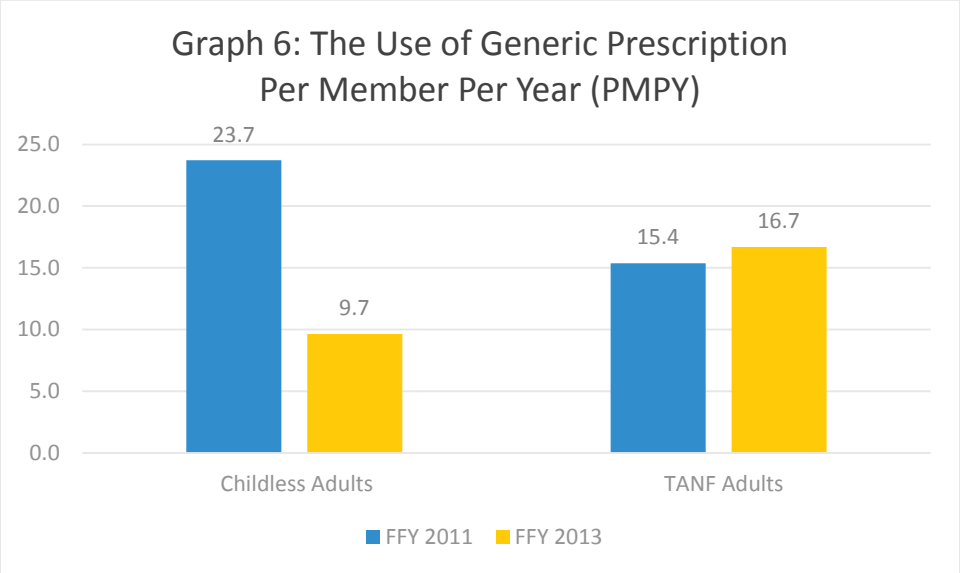


Enrollment Category	Federal Fiscal Year	Baseline Population	Number of Unique Members Using Office Visits for Ongoing Diabetes Care	Total Number of Claims for Members Using Office Visits for Ongoing Diabetes Care	Average Number of Claims Per Member Using Office Visits for Ongoing Diabetes Care	Relative % Change from 2011 to 2013
Childless Adults	FFY 2011	203,860	23,597	313,086	13.27	
	FFY 2013	83,347	11,829	210,320	17.78	34%
TANF Adults	FFY 2011	234,573	16,613	191,446	11.52	
	FFY 2013	228,440	17,559	271,269	15.45	34%

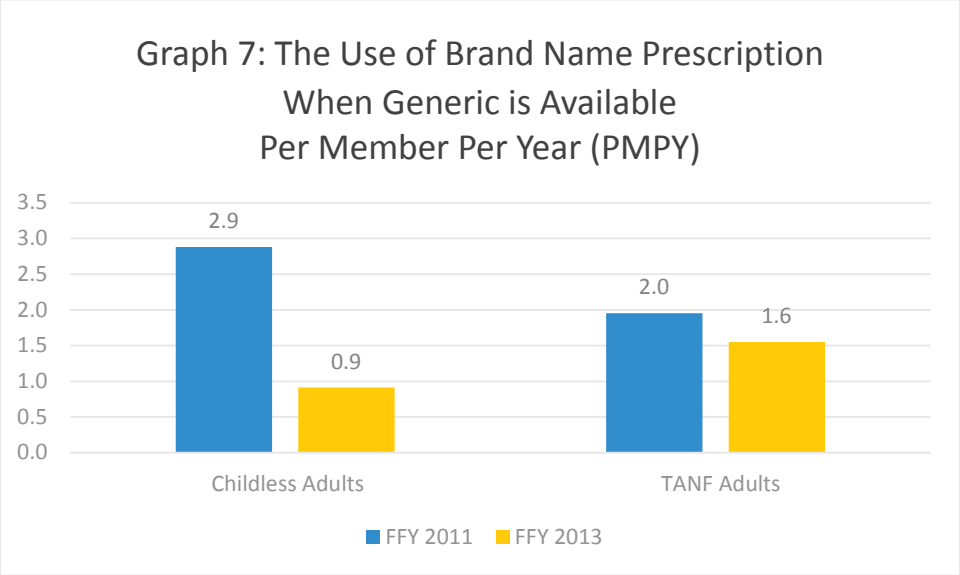
The relative use of brand name medication by Adults without Dependent Children declined in FFY 2011-2013. The number of brand-name medications prescriptions filled by Child Adults decreased by 66% from 6.2 prescriptions per member per year (PMPY) to 2.1 prescriptions PMPY. Similar drops in utilization were observed for the use of generic drugs (-59%) and brand-name drugs with generic equivalents (-68%) by Childless Adults. By contrast, the utilization of generic drugs by TANF Adults increased by 9%, while the use of brand-name drugs and brand-name drugs with generic equivalents decreased by 3% and 21% respectively in FFY 2011-2013. This measure is more likely a reflection of the volatility in the childless adult enrollment, which caused a drop in enrollment from 192,011 in October 1, 2011 to 70,844 in October 2013. A deeper analysis regarding the impact of enrollment changes on utilization would need to be conducted.



Enrollment Category	Year	Baseline Population	The Use of Brand Name Prescription Per Member Per Year (PMPY)	Relative % Change from 2011 to 2013
Childless Adults	FFY 2011	203,860	6.2	
	FFY 2013	83,347	2.1	-66%
TANF Adults	FFY 2011	234,573	3.6	
	FFY 2013	228,440	3.5	-3%

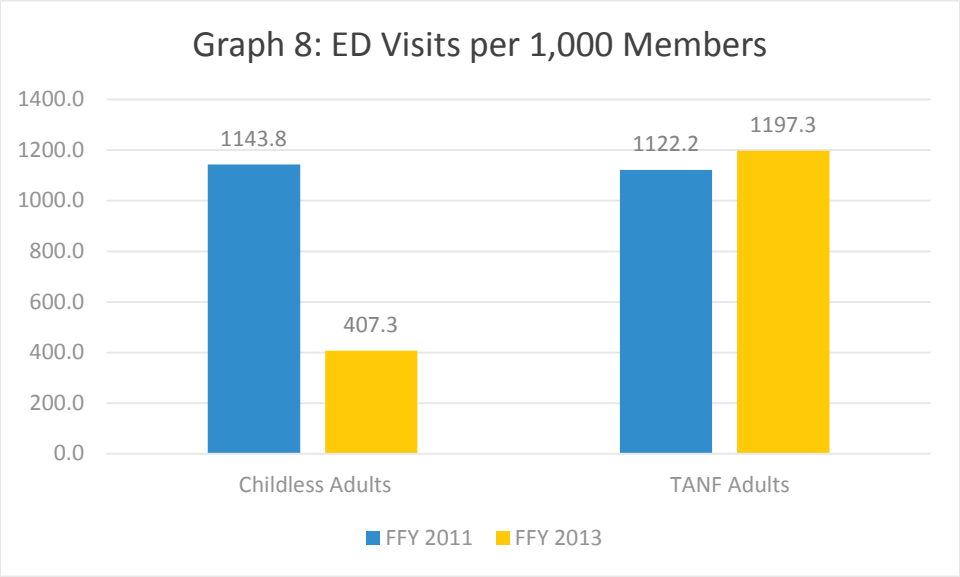


Enrollment Category	Year	Baseline Population	The Use of Generic Prescription Per Member Per Year (PMPY)	Relative % Change from 2011 to 2013
Childless Adults	FFY 2011	203,860	23.7	
	FFY 2013	83,347	9.7	-59%
TANF Adults	FFY 2011	234,573	15.4	
	FFY 2013	228,440	16.7	9%

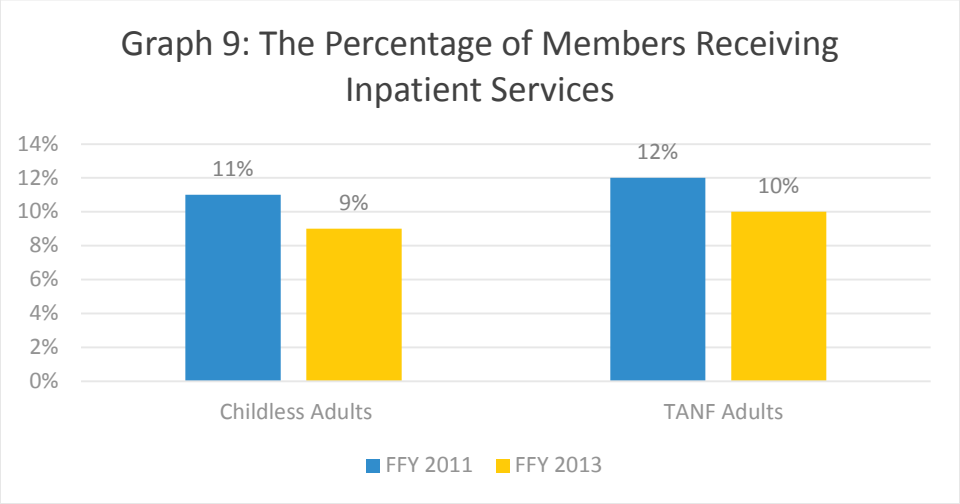


Enrollment Category	Year	Baseline Population	The Use of Brand Name Prescription When Generic is Available Per Member Per Year (PMPY)	Relative % Change from 2011 to 2013
Childless Adults	FFY 2011	203,860	2.9	
	FFY 2013	83,347	0.9	-68%
TANF Adults	FFY 2011	234,573	2.0	
	FFY 2013	228,440	1.6	-21%

Use of emergency room services among the Childless Adult population resulted in a significant decline. In 2011, Emergency Department (ED) utilization for Childless Adults was 1,144 visits per 1,000 members. In 2013, ED visits for this population declined to 407 visits per 1,000 members (dropping by 737 visits per 1,000 members). In contrast, ED utilization for TANF adults increased slightly from 1,122 ED visits per 1,000 members in FFY 2011 to 1,197 ED visits per 1,000 members in FFY 2013.

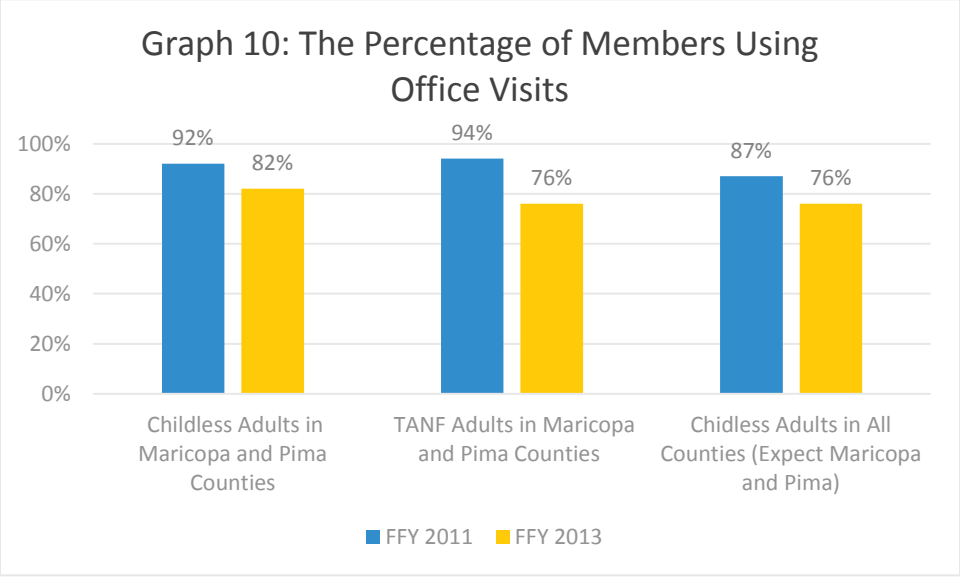


The relative use of inpatient services by Childless Adults remained the same. In contrast to ED utilization, the use of inpatient services by Childless Adults remained relatively consistent over the evaluation period. In FFYs 2011-2013, the use of inpatient services by Childless Adults and TANF Adults decreased by 2%.



Enrollment Category	Year	Baseline Population	Number of Unique Members Receiving Inpatient Services	Percentage of Members Receiving Inpatient Services	Relative % Change from 2011 to 2013	Asymp. Sig
Childless Adults	FFY 2011	203,860	22,610	11%		
	FFY 2013	83,347	7,539	9%	-2%	P<0.001
TANF Adults	FFY 2011	234,573	27,471	12%		
	FFY 2013	228,440	23,726	10%	-2%	P<0.001

Childless Adults in Maricopa and Pima counties had higher utilization rates for provider office visits compared to TANF Adults in Maricopa and Pima counties, and Childless Adults in other counties. In 2013, provider office visits were 5% higher for Childless Adult members in Maricopa and Pima counties (82%) compared to TANF Adults in Maricopa and Pima (76%), and Childless Adults in other counties (76%). Perhaps the biggest surprise among the findings is that the utilization office visits decreased substantially for all three groups in FFYs 2011-2013—Childless Adults in Maricopa and Pima (-10%), TANF Adults in Maricopa and Pima (-18%), and Childless Adults in other counties (-11%)—with Childless Adults in Maricopa and Pima counties experiencing the smallest decline in utilization. This decrease is less likely due to the cost-sharing requirements and more likely the result of other factors outside the scope of this study.



Enrollment Category	Year	Baseline Population	Number of Unique Members Using Office Visits	Percentage of Members Using Office Visits	Relative % Change from 2011 to 2013	Asymp. Sig
Childless Adults Maricopa and Pima Counties	FFY 2011	124,537	114,835	92%		
	FFY 2013	56,265	46,355	82%	-10%	P<0.001
TANF Adults Maricopa and Pima Counties	FFY 2011	137,798	129,215	94%		
	FFY 2013	163,973	124,952	76%	-18%	P<0.001
Childless Adults in All Counties (Except Maricopa and Pima)	FFY 2011	59,343	51,454	87%		
	FFY 2013	29,047	22,200	76%	-10%	P<0.001

Conclusion:

The objective of this evaluation was to examine the effect of mandatory copays for the Childless Adult population on appropriate utilization of services. Overall, the findings from this analysis show higher copays for Childless Adults did not adversely affect access to health care services. Adults without Dependent Children in Maricopa and Pima counties who were subject to the NEMT copays utilized provider office visits at a higher rate relative to TANF Adults in Maricopa and Pima counties, and Childless Adults in other counties. Moreover, the utilization of chronic disease management services by Adults without Dependent Children improved during the evaluation period. The results show that Childless Adults were more likely than TANF Adults to use office visits for ongoing asthma and diabetes care.

In contrast to outpatient services, the utilization of prescription medication by Childless Adults experienced declines. Due to the volatility in the childless adult enrollment, which caused a drop in enrollment from 192,011 in October 1, 2011 to 70,844 in October 2013. Without more information on the utilization trends of those adults that lost coverage during that time as compared to adults who remained on the program, it is difficult to conclude that copayments impacted the decrease of brand-name medications prescriptions, generic prescription, and brand name drugs with generic equivalents filled by Child Adults. Given the pattern of discontinuation observed for prescription medication, AHCCCS should consider additional policy levers and incentives to promote the use of generics and preventive medications by Childless Adults.

Non-emergency use of the emergency room for Childless Adults experienced lower utilization of emergency room services. In 2013, ED visits for this population declined to 407 visits per 1,000 members (dropping by 737 visits per 1,000 members). Despite the decline in emergency room utilization, which likely was impacted by introduction of copayments, the copay's impact on the use of inpatient services was small. In FFYs 2011-2013, the use of inpatient services by Childless Adults and TANF Adults decreased only by 2%. The joint probability of these two events suggests that the cost-sharing changes for Childless Adults may have resulted in more appropriate utilization of emergency room services. However, more analysis is needed to confirm this correlation.

Study Limitation:

The largest limitation to this analysis is the lack of a similar comparison group to understand what care experience would have been for the Childless Adult population in lieu of the mandatory copayments. A good comparison group should consist of members whose out of pocket cost did not change in FFYs 2011-2013, but have similar demographic variables as the Childless Adult population. This comparison group would allow researchers to control for confounding factors, and deduce that the observed differences between the two populations are due to the intervention.

Given this criteria, we believe TANF Adults are not an equal comparison group for the Child Adult population. The data obtained during the baseline (FFY 2011) and re-measurement (FFY 2013) periods shows substantial demographic differences between the two populations—TANF enrollees were more likely to be female compared to the Childless Adult enrollees.

Additionally, because TANF Adults are caring for children they may have additional and different healthcare needs compared to Childless Adults. Even traditional covariance analysis adjustments may be inadequate to eliminate this bias.

Another major limitation of this analysis is the decrease in the number of Childless Adults enrolled in AHCCCS. In October 1 2011, 192,011 Childless Adult members were enrolled in AHCCCS, by December 1, 2013 enrollment for this population dwindled to 67,770—falling by 64%. The significant drop in Childless Adult enrollment certainly introduces additional bias that could comprise the study's validity.

Lastly, other casual factors that were unaccounted for could have impacted the outcome of this study. The primary of these factors is changes to covered benefits that occurred during the Great Recession, which included elimination or limitation to a number of optional benefits in the program. Furthermore, the State is unable to determine whether the mandatory Childless Adult copayments were requested and collected by all providers at the point of service.