



Arkansas TEFRA-Like Section 1115(a) Medicaid Demonstration Waiver Final Evaluation Report

March 2018



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1. Executive Summary

The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 offered states the option to provide healthcare to children living with disabilities and whose family incomes were too high to qualify for traditional Medicaid.

Before 2002, Arkansas opted to place eligible disabled children in traditional Medicaid by assigning them to a new aid category within its Medicaid State Plan. While this arrangement allowed the children to remain in their homes, it ultimately placed an unsustainable financial burden on the State during a time when budget limitations were becoming more restrictive. To address the financial viability of the program, the State transitioned the disabled children from traditional Medicaid to a TEFRA-like, 1115(a) demonstration waiver program. Section 1115(a) demonstration waivers are designed to provide services not traditionally covered by Medicaid programs and to expand Medicaid coverage to individuals who otherwise would not be eligible. Using the flexibility provided by a demonstration waiver, Arkansas developed and implemented a sliding scale premium fee structure based on the family's income. Arkansas approved the 1115(a) TEFRA-like demonstration waiver (the Demonstration) in October 2002 and implemented it January 1, 2003. Following the initial five-year demonstration period, the waiver has continued to be renewed, with the current renewal period ending December 31, 2017.

The Arkansas Department of Human Services (DHS), Division of Medical Services (DMS), contracted with Buccaneer Computer Systems & Services, Inc., a General Dynamics company for the final evaluation of Arkansas' 1115(a) Demonstration waiver. The previous vendor, Health Services Advisory Group, Inc. (HSAG), conducted an interim evaluation of Arkansas's 1115(a) Demonstration waiver and submitted for June 2017 deliverable for submission with the TEFRA 1115 demonstration waiver extension renewal application.

Research Hypotheses

Buccaneer, in collaboration with DMS, evaluated the Demonstration using four of the five research hypotheses. One hypothesis¹⁻¹ could not be assessed for the interim and final evaluation due to the availability of trend data. The final evaluation was scheduled to follow through the current Demonstration period ending December 31, 2017, but due to limitations of the data pull for the wellness visits and annual dental visits measures, the performance period of January 1, 2016 – December 31, 2016 results were analyzed. The four research hypotheses assessed for this final evaluation include:

¹⁻¹ Hypothesis 2 states: "Access to timely and appropriate preventive care remained the same or improved over time for members of the Arkansas TEFRA-like demonstration."



- Demonstration beneficiaries have equal or better access to health services compared to the Medicaid ARKids First A (ARKids A) beneficiaries.
- Enrollment in the Demonstration has improved the patient experience for program beneficiaries by increasing access to healthcare services.
- Satisfaction with the quality of care received by Demonstration beneficiaries has remained the same or improved over time.
- The proportion of Demonstration beneficiaries who experience a lockout period (a lockout occurs when a custodial parent [or parents] fails to pay TEFRA premiums for three months) is less than the proportion expected by the State.

Study Design

The goal of this final evaluation was to assess the Demonstration’s impact on the access and quality of healthcare for all children eligible for the Demonstration. The evaluation was designed to assess the effectiveness of the Demonstration on five research hypotheses as provided by previous vendor and as approved by the Centers for Medicare & Medicaid Services (CMS). The evaluation included an examination of the Demonstration’s performance on a set of outcome and satisfaction measures over time and relative to a comparable population in the Arkansas Medicaid program as well as national benchmarks or averages, where applicable. Detailed descriptions of each measure, including a description of the numerator and denominator, the sources of data, and the measure population used for each measure are presented in Appendix A.

The study population (i.e., Demonstration group) consisted of all beneficiaries covered under Title XIX of the Social Security Act in the State of Arkansas, younger than 19 years of age, who met the medical necessity requirement for institutional care, had income that is less than the long-term care Medicaid limit, and did not have countable assets greater than \$2,000.²⁻² A comparison group, comprised of ARKids A program beneficiaries younger than 19 years of age, was used for select measures. ARKids A provides health insurance to children who qualify based on family income level.

DMS, HSAG and Buccaneer used multiple sources of data to assess the research hypotheses: Table 1-1 summarizes the data sources used for the Demonstration final evaluation.

Table 1-1—Data Sources

Data Source	Data Owner	Data Usage	Measurement Period
Administrative Data Sources			
Medicaid Management Information System (MMIS) Decision Support System (DSS)	DMS	HEDIS measures (Wellness visits and annual dental visits)	01/01/2016–12/31/2016
Arkansas Immunization Information System (AR WebIZ)	ADH	Immunization measures	05/12/2015–05/11/2016

²⁻² Coverage and delivery of benefits to eligible members are consistent with section 1902(a)(10)(A)(i)(VIII) of the Act and 42 CFR Section 435.119.



Survey-Based Data Sources			
TEFRA Beneficiary Satisfaction Survey (TEFRA Survey)	DMS/AFMC	Patient experience & satisfaction	2015–2016
TEFRA Lockout Beneficiary Satisfaction Survey (Lockout Survey)	DMS/AFMC	Patient experience & satisfaction	2017

HSAG and Buccaneer used the Z-test and chi-square test to assess the quality of care the Demonstration’s beneficiaries received as well as the impact of the lockout policy. HSAG and Buccaneer used the Z-test for the TEFRA Survey results comparisons while using the chi-square test for cross-sectional comparisons between the two populations, for interim and final evaluation, respectively.

Study and Data Limitations

As described in the interim evaluation report, the Demonstration was projected to report on findings through the end of December 31, 2017. Due to data limitations of the HEDIS measures of wellness visits and annual dental visits and Arkansas Medicaid claims pull, the 2017 HEDIS specifications were implemented using the performance period of January 1, 2016 – December 31, 2016. Medicaid claims run out of 12-months was used to reflect the most accurate results. Results for immunization and TEFRA Beneficiary Satisfaction Survey were the same conclusions as provided in the interim evaluation report as delivered by previous vendor. Limitations included the following: Arkansas Medicaid claims run out, immunization registry data availability from Arkansas Department of Health (ADH) resource due to system updates, most current set of findings from TEFRA Beneficiary Satisfaction Survey, the inability to identify a fully adequate comparison group for the outcomes-based measures due to the multifaceted level of care required by the beneficiaries of the Demonstration, the low number of beneficiaries that responded to the Lockout Survey and related challenges regarding telephone-based surveys, and inconsistent measurement periods across different data sources depending on the hypothesis being assessed.

Findings

During the interim findings, the overall number of beneficiaries enrolled in the Demonstration (i.e. the study group) was 3,707, and 260,450 beneficiaries were enrolled in the ARKids A Medicaid program (i.e., the comparison group) during the measurement period. Both values slightly increased in the final findings, where the overall number of beneficiaries enrolled in the Demonstration was 3,849 and 292,821 beneficiaries were enrolled in the ARKids A Medicaid program during the measurement period of January 1, 2016 - December 31, 2016. Beneficiaries in the study group were slightly younger than beneficiaries in the comparison group. Most of the study group were male, whereas a more even distribution of females and males was observed among the comparison group. While most participants in both the study and comparison groups were classified as white, the percentage among the study group was larger than the percentage among the comparison group. The bulk of study and comparison group beneficiaries resided in central and northwest Arkansas. Detailed demographic findings are presented in Table 4-1.



Immunizations

Under the final evaluation report, immunization reported the same findings as the interim evaluation report due to limitations of Arkansas Immunization Information System (AR WebIZ) and system updates for Arkansas Department of Health (ADH). For five of the seven healthcare and utilization measures, rates were significantly lower among the study group than among the comparison group: *Immunizations for Adolescents Combination 1* (49.75% and 78.33%, respectively), *Well-Child Visits in the First 15 Months of Life—Six or More Visits* (1.54% and 33.35%, respectively), *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* (26.63% and 57.06%, respectively), *Adolescent Well-Care Visits* (30.50% and 36.47%, respectively) and *Annual Dental Visits* (34.62% and 61.71%, respectively).

As reported in the interim evaluation report, the study group experienced statistically higher rates for *Childhood Immunization Status Combination 2* (72.07%) and *Childhood Immunization Status Combination 3* (70.27%) compared to the comparison group (62.17% and 58.70%, respectively).

Also reported in the interim evaluation report, beneficiaries within the Demonstration reported improved access to care following enrollment in the Demonstration as measured by the TEFRA Survey. The number of respondents reporting “No Problem” seeing a primary care provider (PCP) increased from approximately 75% before enrollment in the Demonstration to more than 90% in 2015 and 2016. Access to prescription medications increased following enrollment in the Demonstration for both 2015 (69.24% in the six months prior to enrollment; 84.82% following enrollment) and 2016 (68.39% prior to enrollment; 86.66% following enrollment). Ability to access urgent care also increased following enrollment in the Demonstration. In 2015, 94.68% of survey respondents indicated that their children had “No Problem” getting urgent care after enrollment in TEFRA, compared with 77.03% prior to enrollment. In 2016, a similar increase was observed, with the ability to access to urgent care increasing from 70.48% to 94.23% following enrollment in the Demonstration.

Furthermore, respondents of the TEFRA Survey reported a high level of satisfaction with the Demonstration and their ability to obtain timely access to care in both 2015 and 2016, with over 95% reporting that they could “Usually” or “Always” obtain care right away and approximately 92% reporting that they could “Usually” or “Always” obtain care when wanted, but not needed right away. Additionally, in the area of “How Well Doctors Communicate,” TEFRA Survey respondents showed high rates of satisfaction. Over 83% of respondents reported that a doctor “Usually” or “Always” explained things in an understandable way to their child. Furthermore, for three measures indicating that doctors listened carefully to them, showed respect for them, and spent enough time with their children, at least 94% of respondents reported being “Usually” or “Always” satisfied. Overall, 72.0% of respondents in 2015 and 72.7% of respondents in 2016 rated the Demonstration an “8” or higher on a scale of “0” to “10,” with 1 being the lowest possible rating and 10 being the highest possible rating.

The proportion of beneficiaries participating in the Demonstration who experienced a lockout period was significantly less than the proportion expected by the State. The observed rate of TEFRA



beneficiaries who experienced a lockout was 3.79% in 2017 of the total surveys received, while the expected rate, based on initial estimates by DMS, was 5.00%.

Final Conclusions

Rates were significantly lower for the study group for many study indicators (i.e., immunizations for adolescents, wellness visits, and annual dental visits) compared to the comparison group. As displayed in the interim evaluation report, the only outcome measures with significantly higher rates occurring among the study group were the rates for *Childhood Immunization Status Combination 2* and *Childhood Immunization Status Combination 3*. However, the differences observed between the findings may be due to the fact that the study group does not equally match the comparison group. The comparison was designed between two Medicaid populations that are not necessarily similar in medical needs. Caution should be used when interpreting comparative results.

Conversely, TEFRA beneficiaries reported a high level of satisfaction with quality of care and provider communication as well as improved access to care following enrollment in the Demonstration. The disparity between the satisfaction surveys and the rates for the study indicators further suggests that the population groups were not comparable. Overall, the Demonstration has met the needs of the population, but there is still room for improvement in delivery and provision of care.

Results from the TEFRA Survey and the Lockout Survey show that beneficiaries reported a high level of satisfaction with the quality of care and access to healthcare services received through the Demonstration. Similarly, results show that' perception of their healthcare experiences improves following enrollment in the program.

While beneficiaries of the Demonstration require complex care, only a small number of children are covered by the program. Consequently, any inferences regarding impact of the Demonstration should be made with caution. Moreover, the framework of the Demonstration should be considered when interpreting evaluation results. Many families use TEFRA to supplement private insurance, which regularly places caps on some services within a calendar year.

2. Demonstration Description

The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 gave individual states the option to provide healthcare benefits to children living with disabilities and whose family incomes were too high to qualify for traditional Medicaid. Sometimes called the Katie Beckett option,³⁻¹ this program is associated with the child whose experience with viral encephalitis at a young age left her family in financial hardship. If Katie had continued receiving treatment at the hospital, she would have qualified for Supplemental Security Income (SSI) through Medicaid; however, if she were treated at home, her parents' income would have rendered her ineligible for Medicaid. Interestingly, the hospital-based care was six times more than the cost of home-based care. To address the issues associated with this, President Ronald Reagan and the Secretary of Health and Human Services created a committee to review the regulations and ensure that children with disabilities could receive home-based treatment (the Katie Beckett option), the action of which then resulted in Section 134 of the TEFRA.

Before 2002, Arkansas opted to place eligible disabled children in traditional Medicaid by assigning them to a new aid category within its Medicaid State Plan. While this arrangement allowed the children to remain in their homes, it ultimately placed an unsustainable financial burden on the State during a time when budget limitations were becoming more restrictive. To address the financial viability of the program, the State chose to transition the disabled children from traditional Medicaid to a TEFRA-like, 1115(a) demonstration waiver program.

Section 1115(a) demonstration waivers are designed to provide services not traditionally covered by Medicaid programs and to expand Medicaid coverage to individuals who otherwise would not be eligible. These waivers facilitate states' approaches to innovative service delivery; they are intended to improve patient care while increasing efficiency, lowering costs, and allowing states more flexibility in designing and implementing programs. These combined elements made the 1115(a) demonstration waiver a viable solution for continuing to provide services to this special population of Arkansas children.

Using the flexibility available within a demonstration waiver, Arkansas was able to develop and implement a sliding scale premium fee structure based on the family's income, effectively passing a portion of the cost to the eligible child's family. Families with annual incomes of less than \$25,000 were exempted from the premium requirement; program eligibility was determined solely on the assets and resources of the child. Arkansas's 1115 TEFRA-like demonstration waiver (the Demonstration) was originally approved in October 2002 and implemented January 1, 2003. Following the initial five-year demonstration period, the waiver has continued to be renewed, with the current renewal period ending December 31, 2017.

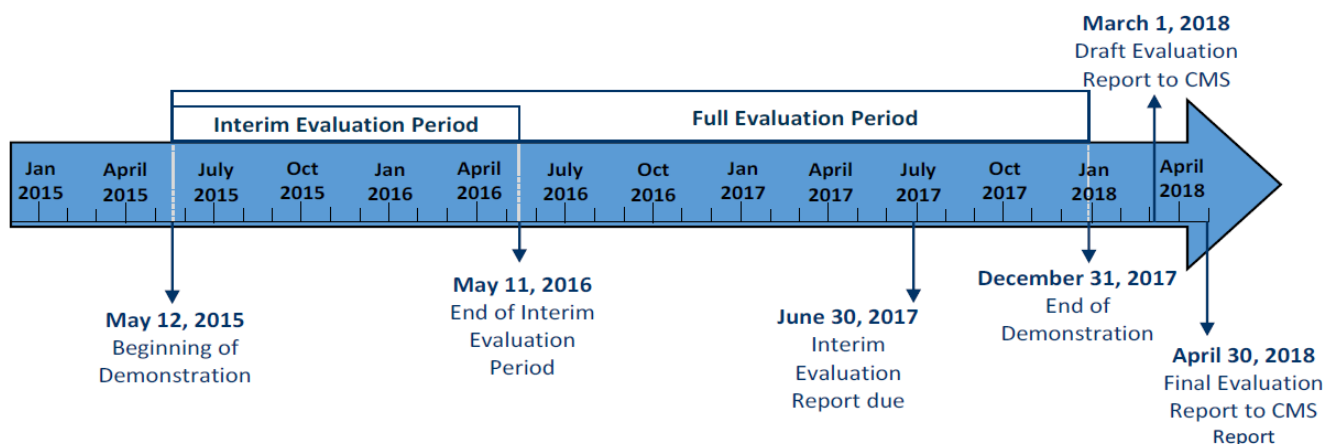
³⁻¹ Hevesi, Dennis. "Katie Beckett, Who Inspired Health Reform, Dies at 34." *The New York Times*. May 22, 2012: http://www.nytimes.com/2012/05/23/us/katie-beckett-who-inspired-health-reform-dies-at-34.html?_r=0. Accessed on April 25, 2017.

3. Study Design

The primary goal of this evaluation was to assess the impact of the Demonstration on the access and quality of healthcare for all children eligible for the program through five research hypotheses as provided by previous vendor and as approved by the Centers for Medicare & Medicaid Services (CMS). Each research hypothesis included one or more evaluation measures. Wherever possible, each measure was compared against national benchmarks or a comparison group.

Included in the evaluation are examinations of the Demonstration's performance on a set of outcome and satisfaction measures over time and relative to a comparable population in the Arkansas Medicaid program, where applicable. Presented in Appendix A, each measure is described in detail and includes a description of the numerator and denominator, the sources of data, and the measure population used for each hypothesis.

Demonstration Timeline



Study Population

The study population was divided into two groups to operationalize the evaluation—i.e., the study group and a comparison group, where appropriate. The study group consisted of all beneficiaries covered under Title XIX of the Social Security Act in the State of Arkansas, who were younger than 19 years of age, met the medical necessity requirement for institutional care, had income less than the long-term care Medicaid limit, and did not have countable assets greater than \$2,000.⁴⁻¹ A comparison group comprised of Medicaid ARKids First A (ARKids A) program beneficiaries was used for select measures.

⁴⁻¹ Coverage and delivery of benefits to eligible members are consistent with section 1902(a)(10)(A)(i)(VIII) of the Act and 42 CFR Section 435.119.



Study Group

The study group was the Demonstration group that consists of beneficiaries enrolled in the Arkansas TEFRA-like program. Beneficiaries were eligible for the Demonstration if they meet the following criteria:

- “Disabled” according to the Social Security Administration definition
- Younger than 19 years of age
- Residents of Arkansas who have U.S. citizenship or are qualified aliens
- Have a Social Security number or have applied for one
- Have an annual income that is up to 3 times the current Supplemental Security Standard Payment Amount (SSI/SPA) (parental income not considered)
- Have countable assets that do not exceed \$2,000 (parental assets not considered)
- Meet the medical necessity requirement for institutional care

During the reporting period for interim evaluation of May 12, 2015, through May 11, 2016, and final evaluation of January 1, 2016 – December 31, 2016, the volume of children participated in the Demonstration were 3,707 and 3,849, respectively.⁵⁻²

Comparison Group

ARKids A provides health insurance to children who qualify based on family income level. Analyses conducted with this comparison focused on cross-sectional analyses. Children may have been eligible for the ARKids A program if they met the following criteria:

- Younger than 19 years of age
- Residents of Arkansas who have U.S. citizenship or are qualified aliens
- Have a Social Security number or have applied for one
- Have a family income below the income eligibility limits based on family size and the federal poverty level (FPL)

Research Hypotheses

Five research hypotheses were selected in the design phase to evaluate the Demonstration. Due to the availability of trend data, one hypothesis⁶⁻³ could not be assessed. The four research hypotheses assessed for the final evaluation of the Demonstration include:

^{5 -2} The number of members participating in the TEFRA-like demonstration from May 12, 2015, through May 11, 2016 (interim evaluation) and January 1, 2016, through December 31, 2016 (final evaluation), according to administrative MMIS data.

^{6 -3} Hypothesis 2 states: “Access to timely and appropriate preventive care remained the same or improved over time for members of the Arkansas TEFRA-like demonstration.”



- Demonstration beneficiaries have equal or better access to health services compared to the Medicaid ARKids First A beneficiaries.
- Enrollment in the Demonstration has improved the patient experience for program beneficiaries by increasing access to healthcare services.
- Satisfaction with the quality of care received by Demonstration beneficiaries has remained the same or improved over time.
- The proportion of Demonstration beneficiaries who experience a lockout period is less than the proportion expected by the State.

Data Sources

Multiple sources of data were used to assess the research hypotheses. The data collected include data from administrative sources and survey-based data. Administrative data sources include information extracted from DMS' Medicaid Management Information System (MMIS) and the associated Decision Support System (DSS), as well as the Arkansas Department of Health's (ADH's) Arkansas Immunization Information System (AR WebIZ). Survey-based data sources include results from the *2016 Arkansas Medicaid TEFRA Beneficiary Satisfaction Survey* and the *2017 Arkansas TEFRA Lockout Beneficiary Satisfaction Survey*.

Administrative Data⁷⁻⁴

MMIS/DSS

The MMIS data source is used to collect, manage, and maintain Medicaid beneficiary files (i.e., eligibility, enrollment, and demographics) and fee-for-service claims; while the DSS is an internal database used by DMS and its contractors to mine, collect, and query MMIS data repositories. DMS, HSAG and Buccaneer worked with key data owners to ensure that appropriate data use agreements were in place to obtain the required data. Data-sharing agreements were initiated to allow access to and use of Medicaid claims and encounters, beneficiary demographics, beneficiary eligibility, and provider data.

To ensure collection of accurate and complete data, extraction protocols included a 9-month lag (HEDIS measures) to allow time for most claims to be processed through the MMIS. Use of fee-for-service claims was limited to final, paid status claims and encounters. Interim transactions and voided records were excluded from all evaluations because these types of records introduce a level of uncertainty (related to matching adjustments and third-party liabilities to the index claims) that can affect reported rates. Institutional and professional claims were used to calculate the various outcome measures, while beneficiary demographic files were used to assess beneficiary age, gender, and other demographic information. Eligibility files were used to verify a beneficiary's enrollment in the State's Medicaid programs. Finally, the provider data files were used to identify specific practice characteristics for

⁷⁻⁴ The original evaluation design included the TEFRA premium payment monitoring data as an administrative data source, but these data were unavailable for this analysis.



measure calculations. Legacy MMIS/DSS data were extracted for beneficiaries with eligibility dates from January 1, 2016, through December 31, 2016 for final evaluation on HEDIS measures.

AR WebIZ

The AR WebIZ system, Arkansas's immunization registry, is a confidential, web-based, centralized database that records and maintains immunization records for Arkansas residents. The AR WebIZ system is administered and maintained by the ADH. Please note due to limitations by ADH and system updates to WebIZ, immunization registry data was not available for more recent performance period through end of December 31, 2017.

Survey Data

TEFRA Beneficiary Satisfaction Survey

A consumer survey (modeled after the Consumer Assessment of Healthcare Providers and Systems [CAHPS®]⁸⁻⁵) was used to assess satisfaction with provided healthcare services. For purposes of this evaluation, this instrument was adapted by including specific survey items designed to elicit information that would address research hypotheses regarding access and quality of care.

Regularly, the TEFRA Beneficiary Satisfaction Survey (TEFRA Survey) has been conducted by the Arkansas DMS in collaboration with the Arkansas Foundation for Medical Care (AFMC), a National Committee for Quality Assurance (NCQA) Certified Healthcare Effectiveness Data and Information Set (HEDIS®)⁹⁻⁶ survey vendor. The TEFRA Survey is based on the CAHPS Medicaid child survey and includes topics such as getting care quickly, how well doctors communicate, and rating of healthcare, among others.

As reported in the interim evaluation report, the TEFRA Survey followed a traditional NCQA sampling strategy—1,650 beneficiaries were randomly selected from the MMIS. To be eligible for the study, beneficiaries must have been enrolled in the program for at least six months during 2016, with no more than one 30-day gap in enrollment. Selected beneficiaries received an introduction letter explaining the survey two weeks prior to the first survey mailing. The surveys were mailed with a postage-paid return envelope and cover letter. Ten days later a reminder postcard was sent to beneficiaries who did not respond. One month after the initial mailing, a second survey was sent to those beneficiaries who had not responded. A reminder postcard also followed the second survey. The 2016 TEFRA Survey provides survey results for the 2016 respondents and compares the results to those from the 2014 and 2015 TEFRA Beneficiary Satisfaction Surveys.¹⁰⁻⁷

⁸⁻⁵ CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

⁹⁻⁶ HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

¹⁰⁻⁷ 2016 Arkansas Medicaid TEFRA Beneficiary Satisfaction Survey, https://afmc.org/wp-content/uploads/2017/02/AFMCSVYS_2016TEFRASurveyExecReport_Approved_01252017.pdf



TEFRA Lockout Beneficiary Satisfaction Survey

The TEFRA Lockout Beneficiary Satisfaction Survey (Lockout Survey), modeled after the TEFRA Beneficiary Satisfaction Survey, was conducted in March 2017 by DMS in collaboration with AFMC. The Lockout Survey, conducted using dis-enrolled TEFRA beneficiaries, was designed to obtain responses to questions regarding nonpayment of premiums and resulting case closures. A lockout occurs when a custodial parent(s) of a TEFRA beneficiary fails to pay TEFRA premiums for three months. The parent(s) receives a 10-day advance notice of case closure; if the premium contribution payments are not made in full within the 10-day period, the TEFRA case is closed. If the parent(s) wishes to re-open a TEFRA case, a new application is required as is full payment of back contribution premiums. The responses to the Lockout Survey are used to assist DMS in determining the reasons for premiums not being paid and to provide information about unmet medical needs of dis-enrolled beneficiaries during the lockout period.

The number of cases closed for nonpayment of premiums was small, with 164 total closed cases occurring in 2016; therefore, no sampling restrictions were applied other than limiting the sample to one beneficiary per household and excluding beneficiaries surveyed during Year 1 of the Lockout Survey conducted in 2016. Following these NCQA sampling guidelines, 146 TEFRA lockout beneficiaries were selected for participation in the Lockout Survey. With the TEFRA lockout population being relatively small, DMS chose to administer a telephone-only survey. Per NCQA protocol for telephone-only methodology, surveyors attempted to contact lockout beneficiaries up to a maximum of six times. Attempts were made during three time segments: 9 a.m. to 1 p.m., 1 p.m. to 5 p.m., and 5:30 p.m. to 9:00 p.m.—on varying days of the week and in different weeks. A total of 82 beneficiaries was reached resulting in a contact rate of 56.2%. Refer to Table 1-1 which summarizes the data sources that Buccaneer used for the Demonstration final evaluation.

Analysis Plan

The evaluation uses multiple statistical methods to test hypotheses that address the quality of care received by the Demonstration beneficiaries and the effect of the lockout policy on the respondents.

The primary analytic methods incorporated in this evaluation to assess the research hypotheses were the Z-test and chi-square test. The Z-test was used for TEFRA Survey results comparisons, while the chi square test was used for cross-sectional comparisons between the two populations.

Hypothesis 1: The beneficiaries of the Arkansas TEFRA-like demonstration have equal or better access to health services compared to the Medicaid fee-for-service population (Medicaid ARKids First A).

Methodology

The goal of Hypothesis 1 is to ensure that beneficiaries of the Demonstration program have equal or better access to services available to children in a traditional Medicaid program. Hypothesis 1 compared access to healthcare services obtained by beneficiaries in the Demonstration (i.e., the study group) to



that obtained by beneficiaries in the Medicaid ARKids First A program (i.e., the comparison group). In order to evaluate access to health services across all age groups, comparisons were made using several HEDIS measures, including those for immunizations, wellness visits, and annual dental visits.

The claim-based measures were calculated using administrative claims data from the MMIS/DSS for beneficiaries enrolled in the Demonstration program or ARKids A program from January 1, 2016, through December 31, 2016. The immunization measures were calculated using immunization registry data from the AR WebIZ for beneficiaries enrolled in the Demonstration program, as reflected in the interim evaluation report or ARKids A program from May 12, 2015, through May 11, 2016. Measure calculations were in accordance with the 2017 HEDIS technical specifications for wellness visits and dental visits. As posted under the interim evaluation report, immunizations measures implemented 2016 HEDIS technical specifications by previous vendor.

Hypothesis 1 was assessed using a chi-square¹¹⁻⁸ test to evaluate statistically significant differences between the study group and the comparison group. The analysis was tested using a significance level of $p < 0.05$.

Outcome Measures

The measures included in this analysis are presented in Table 3-2. (See Appendix A for detailed measure descriptions.)

Table 3-2—Hypothesis 1 Measures

Measure Name
<i>Childhood Immunization Status Combination 2</i>
<i>Childhood Immunization Status Combination 3</i>
<i>Immunizations for Adolescents Combination 1</i>
<i>Well-Child Visits in the First 15 Months of Life</i>
<i>Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life</i>
<i>Adolescent Well-Care Visits</i>
<i>Annual Dental Visits</i>

Hypothesis 2: Access to timely and appropriate preventive care remained the same or improved over time for beneficiaries of the Arkansas TEFRA-like demonstration.

¹¹⁻⁸ Methodology deviates from the original evaluation design; the chi-square test is the appropriate statistical method, based on available data.

Methodology

Hypothesis 2 will test whether access of timely and appropriate preventive care has improved or remained the same for Demonstration beneficiaries over time and will be limited to beneficiaries participating in the Demonstration. However, since final evaluation immunization results are not available from Hypothesis 1 and not able to validate re-measurement results for claim-based measures from Hypothesis 1, the results are not able to be provided in the final report.

Initially, as reported in the interim evaluation report, to evaluate changes over time, Hypothesis 2 will use traditional linear regression to determine whether Demonstration beneficiaries' access to timely preventive care improved or remained the same. The measure rate will serve as the dependent variable, while time will be used as the independent variable. The measurement periods that were designed for this analysis were May 12, 2015, through December 31, 2017. A measure rate was to be categorized as improving if the beta coefficient for the independent variable (time) is positive and the p value is less than 0.05. The measure rate was to be categorized as not having changed if the p value is greater than 0.05.

Outcome Measures

The measures included in this analysis are presented in Table 3-3. (See Appendix A for detailed measure descriptions.)

Table 3-3—Hypothesis 2 Measures

Measure Name
<i>Childhood Immunization Status (Combination 2)</i>
<i>Childhood Immunization Status (Combination 3)</i>
<i>Immunizations for Adolescents (Combination 1)</i>
<i>Well-Child Visits in the First 15 Months of Life</i>
<i>Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life</i>
<i>Adolescent Well-Care Visits</i>
<i>Annual Dental Visits</i>

Hypothesis 3: Enrollment in the TEFRA-like demonstration has improved the patient experience for program beneficiaries by increasing the patients' access to healthcare services.

Methodology

This hypothesis tests whether beneficiaries in the Demonstration program experienced improved access to healthcare services after joining the program—i.e., improved abilities to see a primary care provider



(PCP), obtain medication, and obtain urgent care services. The purveyors of the TEFRA Beneficiary Satisfaction Survey incorporated CAHPS-like questions to capture respondents’ experiences and ease with obtaining services before and after joining the Demonstration.¹²⁻⁹

Outcome Measures

The measures included in this analysis are presented in Table 3-4. (See Appendix A for detailed measure descriptions.)

Table 3-4—Hypothesis 3 Measures

Measure Name
<i>Ability to See PCP Pre-TEFRA</i>
<i>Ability to See PCP Post-TEFRA</i>
<i>Ability to Get Medication Pre-TEFRA</i>
<i>Ability to Get Medication Post-TEFRA</i>
<i>Ability to Get Urgent Care Pre-TEFRA</i>
<i>Ability to Get Urgent Care Post-TEFRA</i>

Hypothesis 4: Patient satisfaction for the quality of care received by the beneficiaries in the Arkansas TEFRA-like demonstration has remained the same or improved over time.

Methodology

Patient satisfaction with the Demonstration program over time was assessed by analyzing responses to the TEFRA Beneficiary Survey measures. A Z-test¹³⁻¹⁰ was used to assess whether beneficiary satisfaction had improved over time or remained the same. The analysis was tested using a significance level of $p < 0.05$.

Outcome Measures

The measures included in this analysis are presented in Table 3-5. (See Appendix A for detailed measure descriptions.)

^{12 -9} Methodology deviates from the original evaluation design. Vendors could not conduct a chi-square test of the differences due to unavailability of member-level data.

^{13 -10} Method deviates from original evaluation design. Vendors could not conduct a linear regression due to unavailability of member-level data.

Table 3-5—Hypothesis 4 Measures

Measure Name
<i>Getting Care Quickly: Obtaining Care Right Away for an Illness/Injury/Condition</i>
<i>Getting Care Quickly: Obtaining Care When Wanted, but not Needed Right Away</i>
<i>How Well Doctors Communicate: Doctors Explaining Things in an Understandable Way to Your Child</i>
<i>How Well Doctors Communicate: Doctors Listening Carefully to You</i>
<i>How Well Doctors Communicate: Doctors Showing Respect for What You Had to Say</i>
<i>How Well Doctors Communicate: Doctors Spending Enough Time with the Child</i>
<i>Rating of TEFRA</i>

Hypothesis 5: The proportion of beneficiaries participating in the TEFRA-like demonstration who experience a lockout period is less than the proportion expected by the State.

Methodology

Based on initial estimates and provided in the interim evaluation report, DMS predicted that 5% of Demonstration beneficiaries would experience a lockout. A one-sample Z-test for proportions was used to determine whether the proportion of beneficiaries who experience a lockout significantly differs from the 5% of beneficiaries expected to experience a lockout. The analysis was tested using a significance level of $p < 0.05$.

Outcome Measures

The measures included in this analysis are presented in Table 3-6. (See Appendix A for detailed measure descriptions.)

Table 3-6—Hypothesis 5 Measures

Measure Name
<i>Proportion of Beneficiaries Who Experienced a Lockout</i>

Supplemental Analyses

With the renewal of the Demonstration, the previous vendor, HSAG incorporated several supplemental analyses designed to highlight the impact of the program's lockout mechanism. Specifically, the supplemental analyses addressed the following lockout-related study questions:



1. Does the proportion of beneficiaries experiencing a lockout differ by monthly premium or family income?
2. What factors contributed to beneficiaries not paying their monthly premium?
3. During the lockout period, were the healthcare needs of the beneficiary normally covered by the Demonstration covered through other means? If so, by what means?

To collect information on the reasons that beneficiaries did not make the monthly premium contributions, a consumer survey of beneficiaries who experienced a lockout was conducted. DMS worked with AFMC to implement an appropriate survey methodology for this sub-population. DMS, previous vendor HSAG, and AFMC worked together to define timing, sampling, and survey methodology. A final sample size was determined based on the approved sampling methodology and population.

Based on the existing TEFRA Beneficiary Satisfaction Survey, a 40% response rate was expected. No sampling restrictions existed other than limiting the sample to one beneficiary per household; therefore, 146 TEFRA lockout beneficiaries were selected for the Lockout Survey. The first quarter survey results show that 69 beneficiaries responded to the Lockout Survey, which is a response rate of 47.26%; thus, the 40% response rate was achieved.

Study and Data Limitations

As reported under the interim evaluation report, although every effort has been taken to address study limitations, it is important to understand factors that affect the reported results. These limitations are addressed through methodological controls, but remaining factors can still influence study findings. Study limitations include:

- Inability to identify a true comparison group for the beneficiaries of the Demonstration (i.e., the study group). As a specialized subset of the existing Medicaid population, it is likely that the study group receives a different level of care and different types of care compared to other Medicaid beneficiaries (i.e., the comparison group). This difference makes it difficult to select a matched group for comparisons. For example, the study group may be less likely to have true wellness visits because they are seeing their doctors more often for other issues. To address this limitation, the following analysis used measures (e.g., the immunization measures) that are more universal and independent of clinical status or visit type. Caution should be used when comparing differences between the two groups.
- The current study includes an assessment of beneficiaries' experience with the Demonstration's lockout period for beneficiaries who experience a lockout. Few beneficiaries experienced a lockout; therefore, results identified from that survey are only generalizable to those who did experience a lockout, and not to all beneficiaries of the Demonstration.
- Challenges characteristic of most telephone-based surveys were experienced during the administration of the Lockout Survey. For instance, difficulties were seen in obtaining currently active telephone numbers. There is no mechanism for real-time updating of beneficiaries' contact information in the State's data system; therefore, a change in telephone number may not be captured



until the beneficiary's next enrollment period. The move away from land lines toward broader use of cellular telephones has also made it more difficult to obtain unlisted cell phone numbers. Employing a mixed-mode survey in the future may help to improve response rates.

- Inconsistent measurement periods across different data sources and the use of a variety of data sources depending on the hypothesis being assessed do not allow for comparability across all measures.

4. Findings and Conclusions

Final Study Findings

Demographic Overview

Demographic characteristics of the study population were derived using administrative data from MMIS/DSS. Overall, 3,849 beneficiaries were enrolled in the Demonstration (i.e., the study group) during the measurement period (i.e., January 1, 2016, through December 31, 2016) compared to 292,821 beneficiaries enrolled in the ARKids A Medicaid program (i.e., the comparison group) during the same time period. Table 4-1 presents the distribution of beneficiaries by selected demographic characteristics for the study and comparison groups. GDHS implemented continuous enrollment as provided by 2017 HEDIS specifications for the wellness visits and annual dental visit logic.

Table 4-1—Demographic Comparison of the Study Group to the Comparison Group

Demographic Characteristic	Study Group		Comparison Group	
	N	%	N	%
Age				
0–4 years	844	21.93	80,421	27.46
5–8 years	1,130	29.36	71,127	24.29
9–12 years	897	23.30	63,484	21.68
13+ years	978	25.41	77,789	26.57
Sex				
Female	1,341	34.84	147,554	50.39
Male	2,508	65.16	145,267	49.61
Race/Ethnicity				
White	2,949	76.62	130,738	44.65
Black/African American	269	6.99	58,653	20.03
Hispanic/Latino	28	0.73	4,050	1.38
Other	256	6.65	38,717	13.22
Unknown	347	9.02	60,663	20.72
Region				
Central	1488	38.66	71,050	24.26
Northeast	622	16.16	60,382	20.62
Northwest	1381	35.88	94,502	32.27
Southeast	124	3.22	30,902	10.55
Southwest	234	6.08	35,985	12.29
Unknown	0	0.00	0	0.00



The percentage of beneficiaries in each age group was distributed fairly evenly across the age categories for the study and comparison groups. Beneficiaries in the study group had almost 30% of population in 5 through 8 years of age, where beneficiaries in the comparison group had less than 25% of the same age range. Most of the study group were male (65.16%) whereas a more equal distribution of females and males was observed among the comparison group (50.39% and 49.61%, respectively).

Differences in the distribution of beneficiaries by race and ethnicity were observed across the study populations. While most beneficiaries in both the study and comparison groups were classified as white, the percentage of white beneficiaries in the study group was 76.62%, compared to 44.65% of beneficiaries being classified as white in the comparison group. The percentage of black or African American beneficiaries was lower among beneficiaries in the study group (6.99%) than among beneficiaries in the comparison group (20.03%). The distribution of Hispanic or Latino beneficiaries was comparable across the two study populations (0.73% for the study group; 1.38% for the comparison group). A sizeable percentage of beneficiaries' race was classified as unknown (9.02% of the study group; 20.72% of the comparison group).

Most study group beneficiaries resided in central (38.66%) and northwest Arkansas (35.88%). The largest percentage of the comparison group resided in northwest Arkansas (32.27%). The percentage of beneficiaries residing in the southern regions was smaller in the study group (less than 10%) than in the comparison group (less than 23%).

The dissimilarities observed between the study group and the comparison group suggest underlying differences between the two populations by certain demographic characteristics. Therefore, one must use caution when interpreting comparative results.

Hypothesis 1: The beneficiaries of the Arkansas TEFRA-like demonstration have equal or better access to health services compared to the Medicaid fee-for-service population (Medicaid ARKids First A).

As reported under the interim evaluation report, Table 4-2 presents the results from the study indicators used to assess access to healthcare and utilization of services for beneficiaries enrolled in the Demonstration (i.e., the study group) compared to beneficiaries enrolled in the ARKids A program (i.e., the comparison group). The HEDIS immunization measures used to assess Hypothesis 1 were calculated for beneficiaries enrolled in TEFRA and ARKids A from May 12, 2015, through May 11, 2016. The HEDIS wellness visits and annual dental visits measures used to assess Hypothesis 1 were calculated for beneficiaries enrolled in TEFRA and ARKids A from January 1, 2016, through December 31, 2016. Specifically, the table highlights the results among beneficiaries in the study and comparison groups for each HEDIS measure and whether or not the hypothesis was met based on differences in rates between the two populations. For the immunization measures only, the 2016 national NCQA HEDIS benchmarks are shown for comparison between rates in Arkansas among the study and comparison groups and the United States as a whole. The benchmarks represent the 2016 NCQA HEDIS Audit Means, Percentiles, and Ratios national Medicaid averages. For the wellness and annual dental visits measures only,

the published 2017 State of Health Care Report from the NCQA report cards was used as a national comparison. The 2017 State of Health Care Report included the HEDIS 2015 data collected and generally reflected services delivered during calendar year 2014 as denoted by NCQA. National comparison rates are described as the statistical mean (i.e. average rate) for reported data. Results presented in Table 4-2 indicate if rates are above or below the HEDIS 2016 national Medicaid 50th percentile. A complete list of study indicators and measure descriptions used to assess Hypothesis 1 is presented in Appendix A.

Table 4-2—Healthcare Access and Utilization Study Indicators by Study Population

Study Indicator	Study Group			Comparison Group			Difference ³	Hypothesis Met/Not Met ⁴
	Elig Pop ¹	%	HEDIS (2016) 50th Percentile Comparison ²	Elig Pop	%	HEDIS (2016) 50th Percentile Comparison ²		
<i>Childhood Immunization Status (Combination 2)</i>	111	72.07	↓	17,820	62.17	↓	9.90*	Met
<i>Childhood Immunization Status (Combination 3)</i>	111	70.27	↓	17,820	58.70	↓	11.57*	Met
<i>Immunizations for Adolescents (Combination 1)</i>	199	49.75	↓	14,093	78.33	↑	-28.58*	Not Met
Study Indicator	Study Group			Comparison Group			Difference ³	Hypothesis Met/Not Met ⁴
	Elig Pop ¹	%	HEDIS (2014) 50th Percentile Comparison ²	Elig Pop	%	HEDIS (2014) 50th Percentile Comparison ²		
<i>Well-Child Visits in the First 15 Months of Life⁵</i>	65	S ⁷	↓	20,654	33.35	↓	S ⁷	Not Met
<i>Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life</i>	1,213	26.63	↓	71,775	57.06	↓	-30.43*	Not Met
<i>Adolescent Well-Care Visits</i>	1,177	30.50	↓	92,488	36.47	↓	-5.97*	Not Met
<i>Annual Dental Visits⁶</i>	3,752	34.62	Not Available	266,962	61.71	Not Available	-27.09*	Not Met



- 1 Elig Pop refers to the eligible population used as the denominator for the healthcare access and utilization study indicators.
- 2 The 2016 national NCQA Medicaid HEDIS 50th percentile benchmarks are included for comparison purposes. The 2014 national NCQA Medicaid HEDIS 50th percentile average was again used for comparison purposes (<http://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality/2017-table-of-contents>). Arrow indicates if reported rate for each indicator was above or below the national Medicaid 50th percentile among the study and comparison groups.
- 3 “Difference” refers to the percentage point difference between the rates for the study and comparison groups for each measure. An asterisk (*) indicates that the rate was statistically different between the study and comparison groups (p value $\leq .05$).
- ⁴ Hypothesis 1 considered “Met” if the differences in reported rates among the study group were *not significantly lower* than the reported rates among Hypothesis 1 is considered “the comparison group (p value $< .05$).
- 5 To assess *Well-Child Visits in the First 15 Months of Life* indicator, the *Six or More Visits* sub-indicator was used.
- 6 To assess *Annual Dental Visits* indicator, the *Total Visits* sub-indicator was not available from the 2017 State of Health Care Quality Report.
- 7 S = A measure rate is *Suppressed* if fewer than 11 cases exist in the numerator. If the rate among the study group is *Suppressed*, then the difference is also reported as *Suppressed*.

Findings show that, for most healthcare service and utilization study indicators, the study group did not experience statistically equivalent or higher rates compared to the comparison group, i.e., hypothesis 1 was not met. Specifically, rates were significantly lower among the study group for *Immunizations for Adolescents Combination 1* (49.75% versus 78.33%), *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* (26.63% and 57.06%, respectively), *Adolescent Well-Care Visits* (30.50% and 36.47%, respectively) and *Annual Dental Visits* (34.62% and 61.71%, respectively).

Hypothesis 1 was met only for the *Childhood Immunization Status* study indicators. The study group experienced statistically higher rates of beneficiaries with the appropriate number of immunizations for *Childhood Immunization Status Combination 2* (72.07%) and *Childhood Immunization Status Combination 3* (70.27%) compared to the comparison group (62.17%, 58.70% respectively).

Note that beneficiaries enrolled in the Demonstration program are more likely to have complex medical needs and may have received preventive care during a “sick” visit. Therefore, rates may be disproportionately affected for the study group compared the comparison group.

Hypothesis 3: Enrollment in the TEFRA-like demonstration has improved the patient experience for program beneficiaries by increasing the patients’ access to healthcare services.

As displayed in the interim evaluation report, Table 4-3 presents the results of the 2016 TEFRA Beneficiary Satisfaction Survey, in which guardians of TEFRA beneficiaries were asked if their children’s access to healthcare services improved after enrolling in the Demonstration. Results were obtained from questions about the beneficiaries’ satisfaction with their abilities to see a PCP, get prescription medication, and get emergency or urgent care before and after joining the Demonstration. A complete list of TEFRA Beneficiary Satisfaction Survey indicators along with detailed measure descriptions used to assess Hypothesis 3 are presented in Appendix A.

Table 4-3—Beneficiaries’ Perceptions of Improved Access to Services and Providers Before and After TEFRA Enrollment, 2015 and 2016

Survey Measure ¹	2015				Difference ²	2016				Difference ²
	Pre-TEFRA		Post-TEFRA			Pre-TEFRA		Post-TEFRA		
	n	%	n	%		n	%	n	%	
<i>Access to PCP</i>	450	77.45	559	92.24	14.79	564	75.70	720	93.14	17.44
<i>Access to Prescription Drugs</i>	385	69.24	503	84.82	15.58	476	68.39	643	86.66	18.27
<i>Access to Emergency/Urgent Care</i>	379	77.03	498	94.68	17.65	425	70.48	621	94.23	23.75

¹ Survey questions asked recipients whether access to services and providers was “No Problem,” “A Small Problem,” or “A Big Problem” six months prior to Survey questions asked beneficiaries whether access to services and providers was “No Problem enrollment (i.e., pre-TEFRA) and after enrollment (i.e., post-TEFRA). The results represent the percentage of beneficiaries that indicated access was “No Problem.”

² “Difference” refers to the percentage point difference between the rate for the pre- and post-TEFRA enrollment populations for each measure.

Participants reported improved access to care following enrollment in the Demonstration as measured by the TEFRA Survey. Access to a PCP increased, from approximately 75% of respondents indicating that their child had “No Problem” seeing a PCP prior to enrollment in the Demonstration, to over 90% reporting “No Problem” in both 2015 (92.24%) and 2016 (93.14%).

Among respondents surveyed in 2015, access to prescription medications increased from 69.24% during the six months prior to enrollment in TEFRA to 84.82% following enrollment. A similar pattern was observed among those surveyed in 2016, with access to prescription drugs increasing from 68.39% during pre-TEFRA enrollment to 86.66% following enrollment in the Demonstration. Ability to access emergency or urgent care increased following enrollment in the Demonstration among participants surveyed in 2015, with 94.68% indicating that their child had “No Problem” getting urgent care after enrollment in TEFRA, compared with 77.03% prior to enrollment. A similar increase was observed among respondents surveyed in 2016, with ability to access to urgent care increasing from 70.48% during the pre-enrollment period to 94.23% following enrollment in the Demonstration.

Hypothesis 4: Patient satisfaction for the quality of care received by the beneficiaries in the Arkansas TEFRA-like demonstration has remained the same or improved over time.

As provided in the in the interim evaluation report, Table 4-4 presents the results of the 2016 TEFRA Beneficiary Satisfaction Survey, in which guardians of TEFRA beneficiaries answered questions regarding satisfaction with quality of care over time. Results were obtained from questions about the respondents’ satisfaction in terms of timely access to care and provider communication, and include overall ratings of the Demonstration from 2015 and 2016. A complete list of TEFRA Beneficiary Satisfaction Survey indicators along with detailed measure descriptions used to assess Hypothesis 4 are presented in Appendix A.



Table 4-4—Beneficiaries’ Perceptions of Timely Access and Provider Communication, and Global Program Ratings—2015 and 2016

Measure	2015		2016		Difference ¹	Hypothesis <i>Met/Not</i>
	n	%	n	%		<i>Met</i> ²
Survey Measures—Timely Access						
<i>Getting Care Quickly: Obtaining care right away for an illness/injury/condition</i> ³	250	97.6	335	95.5	-2.1	Met
<i>Getting Care Quickly: Obtaining care when wanted, but not needed right away</i> ³	526	92.6	663	92.3	-0.3	Met
Survey Measures—Provider Communication						
<i>How Well Doctors Communicate: Doctors explaining things in an understandable way to your child</i> ⁴	250	86.8	338	83.1	-3.7	Met
<i>How Well Doctors Communicate: Doctors listening carefully to you</i> ⁴	562	96.6	717	96.8	0.2	Met
<i>How Well Doctors Communicate: Doctors showing respect for what you had to say</i> ⁴	561	97.5	716	97.3	-0.2	Met
<i>How Well Doctors Communicate: Doctors spending enough time with the child</i> ⁴	558	93.7	710	93.7	0.0	Met
Survey Measure—Global Rating						
<i>Rating of TEFRA</i> ⁵	603	72.0	772	72.7	0.7	Met

¹ “Difference” refers to the percentage point difference between the rates for the 2015 and 2016 populations for each measure.

² Hypothesis 4 is considered “*Met*” if the differences in the reported rates among 2016 TEFRA population were *not significantly lower* than those among the 2015 TEFRA population.

³ Survey questions asked beneficiaries if doctors “Always,” “Usually,” “Sometimes,” or “Never” possible to get needed care. Percentage represents Survey questions asked beneficiaries whether it was “Always the percentage of beneficiaries responding with “Always” or “Usually.”

⁴ Survey questions asked beneficiaries if doctors “Always,” “Usually,” “Sometimes,” or “Never” communicated well with the beneficiaries and their families. Percentage represents the percentage of beneficiaries responding with “Always” or “Usually.”

⁵ Survey questions are global rating scales that measure overall satisfaction on a scale of “0” to “10,” with “10” being the highest possible response. Percentage represents the percentage of beneficiaries responding with a rating of “8” or higher.

Across all survey measures from the TEFRA Survey used to assess Hypothesis 4, the differences between the 2016 rates were not significantly lower than the 2015 rates; thus, the hypothesis was met for all indicators. Overall, respondents’ satisfaction with the Demonstration as measured by the TEFRA Survey was rather high.

Despite a “not statistically significant” decrease from 2015 to 2016, rates of beneficiaries’ satisfaction in their ability to obtain timely access to care remained high, with 95.5% of respondents indicating that they could “Usually” or “Always” obtain care right away for an illness, injury, or condition; and 92.3% of respondents indicating that they could “Usually” or “Always” obtain care when wanted, but not needed right away.

Over 83% of respondents reported that a doctor usually or always explained things in an understandable way to their child. Furthermore, at least 94% of beneficiaries indicated that they were “Usually” or “Always” satisfied with how well doctors communicated with them in that their child’s doctor “Usually” or “Always” listened carefully to them (96.6% in 2015; 96.8% in 2016); “Usually” or “Always” showed respect for what they had to say (97.5% in 2015; 97.3% in 2016); and “Usually” or “Always” spent enough time with their child (93.7% in 2015; 93.7% in 2016). The survey measure with the lowest percentage of respondents indicating satisfaction was the overall rating of the Demonstration. However, 72.0% of respondents in 2015 and 72.7% of respondents in 2016 rated the Demonstration an “8” or higher on a scale of “0” to “10,” with “0” being the lowest possible rating and “10” being the highest possible rating.

Hypothesis 5: The proportion of beneficiaries participating in the TEFRA-like demonstration who experience a lockout period is less than the proportion expected by the State.

Hypothesis 5 was met for beneficiaries experiencing a lockout. Of the 3,849 beneficiaries participating in the Demonstration, the proportion who experienced a lockout period was less than the proportion expected by the State. The observed rate of TEFRA beneficiaries who experienced the lockout was 3.79% ($n = 146$) in 2016, while the expected rate was 5.00% ($n = 192$).

Table 4-5—Proportion of Beneficiaries Who Experience a Lockout

Survey Measure ¹	Expected		Observed 2016		Difference ¹	Hypothesis Met/Not Met ²
	n	%	n	%		
<i>Beneficiaries Who Experienced a Lockout</i>	192	5.00	146	3.79	1.21	Met

¹ Difference refers to the percentage point difference between the expected and observed lockout rates for the 2016 TEFRA populations.
² Hypothesis 5 is considered “Met” if the difference in the observed lockout rate among the 2016 TEFRA population was *not significantly higher* than the expected lockout rate.

As delivered for the interim evaluation report, in 2017 AFMC conducted the TEFRA Lockout Survey, collecting information from the guardians of TEFRA beneficiaries who experienced a lockout. Of the 146 beneficiaries who experienced a lockout, 69 responded to the survey. Not all respondents answered all survey questions. Due to the low number of respondents who completed the full survey, rates for beneficiary survey questions cannot be reported.

In general, results of the Lockout Survey show that beneficiaries who experienced a lockout and responded to the survey were more likely to have premiums larger than \$52 and incomes higher than \$50,001. In addition, beneficiaries provided reasons why they were unable to pay their TEFRA program premiums, thereby resulting in the lockouts. Table 4-6 presents the respondents’ reasons that their children’s cases were locked out.

Table 4-6—Reasons Beneficiaries Experienced Lockout

Reason
Could not afford it.
Forgot to pay premiums.
Did not use TEFRA
Administrative issues occurred in processing premium payments.
Private insurance paid for services.
Payer could not afford TEFRA premiums and health insurance premiums.
TEFRA would not take payments over the telephone.
Loss of income.
Moved to another city.

Selected responses suggest key themes as to why beneficiaries experienced a lockout, including unaffordability of TEFRA premium, or TEFRA premium and health insurance premiums together; and administrative issues, including experiencing general issues in processing of premium payments and TEFRA not accepting premium payments by telephone.

During the lockout period, many respondents to the 2017 survey reported being able to meet the medical needs of the TEFRA beneficiary through other means. Most beneficiaries covered by a means other than TEFRA during the lockout period obtained such through a parent's, legal guardian's, or caretaker's current or former employer-offered, union, or private party insurance; and the remainder had insurance through another Medicaid program.

Final Conclusions

While findings from the outcomes-based study indicators indicated that the TEFRA population exhibited significantly lower rates than the ARKids A population for most measures (i.e., immunizations for adolescents, wellness visits, and annual dental visits), TEFRA beneficiaries reported high levels of satisfaction with access to and quality of healthcare provided under the Demonstration. This contrast suggests that, although the effect of the Demonstration has met the needs of the population, room for improvement exists in the delivery and provision of care. Please note the comparison was designed in the earlier stages was between two Medicaid populations but not necessarily similar in medical needs thus does not equally match between two groups.

Nearly all outcomes-based study indicator results were significantly lower among the TEFRA population compared to children enrolled in ARKids A. Again, the differences observed between the findings may be due to the fact that the study group (demonstration) does not equally match the comparison group (ARKids A). The only rates that met Hypothesis 1 were the rates for the *Childhood Immunization Status Combination 2* and *Childhood Immunization Status Combination 3*, with significantly higher rates occurring among the TEFRA population as compared to the ARKids A population.



Results from the TEFRA Survey and the Lockout Survey during the evaluation period provided insight into TEFRA beneficiaries' perceptions of quality of care received through the Demonstration as well as access to services, burden of program premiums, and perception of healthcare experience prior to and following enrollment in the program. In general, TEFRA respondents' satisfaction with key elements of their healthcare remained consistent across the two survey years. Moreover, beneficiaries not only reported high levels of satisfaction with their abilities to access and use services, but also reported improved access to care following enrollment in the Demonstration.

Note that the population covered by the Demonstration is small and that these beneficiaries require complex care; thus, any inferences regarding the impact of the Demonstration should be made with caution. Additionally, the structure of the Demonstration should be taken into account when interpreting the evaluation measure results. Through TEFRA, children may receive services allowed through Medicaid; though, in many cases Medicaid may not be the primary payer. Many families use TEFRA to supplement private insurance that places caps on some services within a calendar year.

Appendix A: Outcome Measures

Table A-1—Outcome Measures for TEFRA- Like Demonstration Evaluation

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Re-measurement Value ¹	Measure Population
HEDIS Measures						
<i>Childhood Immunization Status (Combination 2)</i> ²	0038	The percentage of children 2 years of age who received the appropriate number of doses of the diphtheria, tetanus, and acellular pertussis (DTaP); polio (IPV); measles, mumps, and rubella (MMR); H influenza type B; hepatitis B; and chicken pox vaccines. The denominator is all children who turned age 2 during the measurement year, except those with a contraindication to any specific vaccine. The numerator is all children who received appropriate number of doses of the diphtheria, tetanus, and acellular pertussis (DTaP); polio (IPV); measles, mumps, and rubella (MMR); H influenza type B; hepatitis B; and varicella vaccines.	Core Set of Children's Health Care Quality Measures for Medicaid and CHIP	NCQA	72.07%	All TEFRA-like and ARKids A beneficiaries

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Re-measurement Value ¹	Measure Population
<i>Childhood Immunization Status (Combination 3)²</i>	0038	The percentage of children 2 years of age who received the appropriate number of doses of the diphtheria, tetanus, and acellular pertussis (DTaP); polio (IPV); measles, mumps, and rubella (MMR); H influenza type B; hepatitis B; varicella; and pneumococcal conjugate vaccines. The denominator is all children who turned age 2 during the measurement year, except those with a contraindication to any specific vaccine. The numerator is all children who received appropriate number of doses of the diphtheria, tetanus, and acellular pertussis (DTaP); polio (IPV); measles, mumps, and rubella (MMR); H influenza type B; hepatitis B; varicella; and pneumococcal conjugate vaccines.	Core Set of Children's Health Care Quality Measures for Medicaid and CHIP	NCQA	70.27%	All TEFRA-like and ARKids A beneficiaries
<i>Immunizations for Adolescents (Combination 1)²</i>	1407	The percentage of adolescents who turned 13 years of age during the measurement year and have received the meningococcal vaccine and the tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or the tetanus, diphtheria toxoids vaccine (Td). The denominator is all adolescents who turned 13 during the measurement year, except those with a contraindication to any specific vaccine. The numerator is all children who received both the meningococcal vaccine and either the tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or the tetanus, diphtheria toxoids vaccine (Td).	Core Set of Children's Health Care Quality Measures for Medicaid and CHIP	NCQA	49.75%	All TEFRA-like and ARKids A beneficiaries

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Re-measurement Value ¹	Measure Population
<i>Well-Child Visits in the First 15 Months of Life²</i>	1392	The percentage of children who turned 15 months old during the measurement year and who had 0, 1, 2, 3, 4, 5, 6, or more well-child visits in the first 15 months of life. The denominator is all children who turned 15 months old during the measurement year. For this measure, seven indicators are calculated; so, seven numerators exist, each corresponding to the number of children who received 0, 1, 2, 3, 4, 5, 6, or more well-child visits in the first 15 months of life.	Core Set of Children's Health Care Quality Measures for Medicaid and CHIP	NCQA	1.54% (6+ visits)	All TEFRA-like and ARKids A beneficiaries
<i>Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life²</i>	1516	The percentage of children 3 through 6 years of age during the measurement year who had at least one well-child visit. The denominator is all children 3 through 6 years of age as of the last day of the measurement year. The numerator is all children who had a well-child visit.	Core Set of Children's Health Care Quality Measures for Medicaid and CHIP	NCQA	26.63%	All TEFRA-like and ARKids A beneficiaries
<i>Adolescent Well-Care Visits²</i>	NA	The percentage of beneficiaries 12 through 18 years of age who had at least one well-care visit during the measurement year. The denominator is all beneficiaries 12 through 18 years of age as of the last day of the measurement year. The numerator is all beneficiaries 12 through 18 years of age who had at least one comprehensive well-care visit. (12 through 18 years of age was applied due to TEFRA-like beneficiaries eligible for the Demonstration criteria.)	Core Set of Children's Health Care Quality Measures for Medicaid and CHIP	NCQA	30.50%	All TEFRA-like and ARKids A beneficiaries
<i>Annual Dental Visits²</i>	1388	The percentage of beneficiaries 2 through 20 years of age who had at least one dental visit during the measurement year. The denominator is all beneficiaries 2 through 20 years of age. The numerator is all beneficiaries 2 through 20 years of age who had at least one dental visit during the measurement year.	HEDIS	NCQA	34.62%	All TEFRA-like and ARKids A beneficiaries

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Re-measurement Value ¹	Measure Population
TEFRA Beneficiary Satisfaction Survey Measures						
<i>Ability to See PCP Pre-TEFRA³</i>	NA	The percentage of survey respondents who reported “No Problem” in seeing a personal doctor or nurse preTEFRA. The denominator is all respondents to the preTEFRA Survey question, “How much of a problem, if any, was it for your child to see a personal doctor or nurse?” The numerator is all survey respondents who reported “No Problem.”	TEFRA Beneficiary Satisfaction Survey	AFMC	75.70%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>Ability to See PCP Post-TEFRA³</i>	NA	The percentage of survey respondents who reported “No Problem” in seeing a personal doctor or nurse postTEFRA. The denominator is all respondents to the postTEFRA Survey question, “How much of a problem, if any, was it for your child to see a personal doctor or nurse?” The numerator is the survey respondents who reported “No Problem.”	TEFRA Beneficiary Satisfaction Survey	AFMC	93.14%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>Ability to Get Medication PreTEFRA³</i>	NA	The percentage of survey respondents who reported “No Problem” in getting their child’s prescription medication pre-TEFRA. The denominator is all respondents to the pre-TEFRA Survey question, “How much of a problem, if any, was it to get your child’s prescription medication?” The numerator is all respondents who reported “No Problem.”	TEFRA Beneficiary Satisfaction Survey	AFMC	68.39%	All TEFRA Beneficiary Satisfaction Survey respondents

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Re-measurement Value ¹	Measure Population
<i>Ability to Get Medication PostTEFRA³</i>	NA	The percentage of survey respondents who reported “No Problem” in getting their child’s prescription medication post-TEFRA. The denominator is all respondents to the post-TEFRA Survey question, “How much of a problem, if any, was it to get your child’s prescription medication?” The numerator is all survey respondents who reported “No Problem.”	TEFRA Beneficiary Satisfaction Survey	AFMC	86.66%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>Ability to Get Urgent Care PreTEFRA³</i>	NA	The percentage of survey respondents who reported “No Problem” in getting their child urgent care pre-TEFRA. The denominator is all respondents to the pre-TEFRA Survey question, “How much of a problem, if any, was it for your child to get urgent care?” The numerator is all survey respondents who reported “No Problem.”	TEFRA Beneficiary Satisfaction Survey	AFMC	70.48%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>Ability to Get Urgent Care PostTEFRA³</i>	NA	The percentage of survey respondents who reported “No Problem” in getting their child urgent care post-TEFRA. The denominator is all survey respondents to the postTEFRA Survey question, “How much of a problem, if any, was it for your child to get urgent care?” The numerator is the survey respondents who reported “No Problem.”	TEFRA Beneficiary Satisfaction Survey	AFMC	94.23%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>Getting Care Quickly: Getting Care Right Away for an Illness/Injury/Condition⁴</i>	NA	The percentage of survey respondents who reported “Usually” or “Always” receiving care right away when their child had an illness, injury, or condition. The denominator is all respondents who answered the survey question. The numerator is all respondents who answered that they had “Usually” or “Always” received care right away for an illness, injury, or condition.	TEFRA Beneficiary Satisfaction Survey	AFMC	95.5%	All TEFRA Beneficiary Satisfaction Survey respondents

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Re-measurement Value ¹	Measure Population
<i>Getting Care Quickly: Getting Care When Wanted, but not Needed Right Away⁴</i>	NA	The percentage of survey respondents who reported they were “Usually” or “Always” able to get an appointment at a doctor’s office or clinic as soon as needed. The denominator is all respondents who answered the survey question. The numerator is all respondents who answered that they “Usually” or “Always” obtained an appointment when needed.	TEFRA Beneficiary Satisfaction Survey	AFMC	92.3%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>How Well Doctors Communicate: Doctors Explaining Things in an Understandable Way to Your Child⁴</i>	NA	The percentage of survey respondents who reported that their doctors or healthcare providers “Usually” or “Always” explained things in a way that their child could understand. The denominator is all respondents who answered the survey question. The numerator is all respondents who responded that their healthcare providers “Usually” or “Always” explained things in a way that their child could understand.	TEFRA Beneficiary Satisfaction Survey	AFMC	83.1%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>How Well Doctors Communicate: Doctors Listening Carefully to You⁴</i>	NA	The percentage of survey respondents who reported that their doctors or healthcare providers “Usually” or “Always” listened carefully to them. The denominator is all respondents who answer the surveyed question. The numerator is all respondents who responded that their healthcare providers “Usually” or “Always” listened carefully to them.	TEFRA Beneficiary Satisfaction Survey	AFMC	96.8%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>How Well Doctors Communicate: Doctors Showing Respect for What You Had to Say⁴</i>	NA	The percentage of survey respondents who reported that their doctors or healthcare providers “Usually” or “Always” showed respect for what they had to say. The denominator is all respondents who answered the survey question. The numerator is all respondents who responded that their healthcare providers “Usually” or “Always” showed respect for what they had to say.	TEFRA Beneficiary Satisfaction Survey	AFMC	97.3%	All TEFRA Beneficiary Satisfaction Survey respondents

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Re-measurement Value ¹	Measure Population
<i>How Well Doctors Communicate: Doctors Spending Enough Time With the Child⁴</i>	NA	The percentage of survey respondents who reported that their doctors or healthcare providers “Usually” or “Always” spent enough time with their child. The denominator is all respondents who answered the survey question. The numerator is all respondents who responded that their healthcare providers “Usually” or “Always” spent enough time with their child.	TEFRA Beneficiary Satisfaction Survey	AFMC	93.7%	All TEFRA Beneficiary Satisfaction Survey respondents
<i>Rating of TEFRA⁴</i>	NA	The percentage of survey respondents who rated their TEFRA experience as an “8” or higher on a scale of “0” to “10.” The denominator is all respondents who answered the survey question. The numerator is the respondents who responded with an “8,” “9,” or “10.”	TEFRA Beneficiary Satisfaction Survey	AFMC	72.7%	All TEFRA Beneficiary Satisfaction Survey respondents
Proportion of Beneficiaries Who Experience a Lockout Measure						
<i>Proportion of Beneficiaries Who Experience a Lockout⁵</i>	NA	The proportion of beneficiaries who experienced a lockout during the measurement period. The denominator is all TEFRA beneficiaries. The numerator is the TEFRA beneficiaries who experienced a lockout during the measurement period.	TEFRA premium payment monitoring data system	DMS	3.79%	All TEFRA beneficiaries
TEFRA Lockout Beneficiary Satisfaction Survey Measure						
<i>Financial Burden of Premium Payment⁶</i>	NA	The percentage of survey respondents who reported that TEFRA premium payments were “a big financial burden.” The denominator is all respondents who answered the survey question regarding the financial burden of premium payments. The numerator is all respondents who responded that premium payments were “a big financial burden.”	TEFRA Beneficiary Satisfaction Survey	AFMC	Numbers are too small to report	All TEFRA Beneficiary Satisfaction Survey respondents
¹ Re-measurement values are results from the <i>SFY 2017 TEFRA-Like Section 1115(a) Medicaid Demonstration Extension Final Evaluation Report</i> as provided by GDHS and baseline values are results from the <i>SFY 2017 TEFRA-Like Section 1115(a) Medicaid Demonstration Extension Interim Evaluation Report</i> as provided by previous vendor, HSAG. ² Measures were used to assess Hypothesis 1. Data are from MMIS/DSS. Measurement period was May 12, 2015, through May 11, 2016 for immunization measures and January 1, 2016 – December 31, 2016 for wellness visits and annual dental visit measures. ³ Measures were used to assess Hypothesis 3. Results are the 2016 rates from the <i>2016 Arkansas Medicaid TEFRA Beneficiary Satisfaction Survey</i> .						



⁴ Measures were used to assess Hypothesis 4. Data are from the *2016 Arkansas Medicaid TEFRA Beneficiary Satisfaction Survey*.

⁵ Measures were used to assess Hypothesis 5. Data are from DMS. ⁶ Measure was used to assess the supplemental analyses. Data are from the *2017 TEFRA Lockout Beneficiary Satisfaction Survey*.