ATTACHMENT L

State of Arkansas

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

May 2017

HSAG HEALTH SERVICES ADVISORY GROUP

HSAG HEALTH SERVICES ADVISORY GROUP

Table of Contents

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 Health Services Advisory Group, Inc. (HSAG), to conduct an interim evaluation of Arkansas's 1115(a) Demonstration waiver. A separate, full evaluation of the Demonstration will be conducted following the end of the current Demonstration waiver extension.

Research Hypotheses

HSAG, in collaboration with DMS, evaluated the Demonstration using five research hypotheses. One hypothesis[1-1] could not be assessed for the interim evaluation due to the availability of trend data. The full evaluation, scheduled to follow the current Demonstration period ending December 31, 2017, will include trend analyses to assess the additional hypothesis. The four research hypotheses assessed for this interim evaluation include:

- 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.

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

- 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 interim evaluation was to assess the Demonstration's impact on the access and quality of healthcare for all children eligible for the Demonstration. The evaluation assessed the effectiveness of the Demonstration on five research hypotheses 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, 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.[1-2] A comparison group, comprised of ARKids A program members 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 and HSAG used multiple sources of data to assess the research hypotheses: Table 1-1 summarizes the data sources used for the Demonstration interim evaluation.

Table 1-1—Data Sources

Data Source	Data Owner	Measurement Period
Administrative Data Sources		
Medicaid Management Information System (MMIS) Decision Support System (DSS)	DMS	05/12/2015–05/11/2016
Arkansas Immunization Information System (AR WebIZ)	ADH	05/12/2015–05/11/2016
Survey-Based Data Sources		
TEFRA Beneficiary Satisfaction Survey (TEFRA Survey)	DMS/AFMC	2015–2016
TEFRA Lockout Beneficiary Satisfaction Survey (Lockout Survey)	DMS/AFMC	2017

[1] Differences in measurement periods are based on type of data source and methodology used to obtain data.

[1-2] 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.

HSAG 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 used the Z-test for the TEFRA Survey results comparisons while using the chi-square test for cross-sectional comparisons between the two populations.

Study Limitations

Although methodological controls were employed in the evaluation, some variation in results may be due to one or more of the following factors, which will need to be considered when interpreting the results. These limitations included the following: 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

Overall, 3,707 beneficiaries were enrolled in the Demonstration (i.e., the study group) and 260,450 beneficiaries were enrolled in the ARKids A Medicaid program (i.e., the comparison group) during the measurement period. Members in the study group were slightly younger than members 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 group members resided in central and northwest Arkansas, while most comparison group members resided in northwest Arkansas. Detailed demographic findings are presented in Table 4-1.

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 percent and 78.33 percent, respectively), *Well-Child Visits in the First 15 Months of Life—Six or More Visits* (4.62 percent and 31.13 percent, respectively), *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* (28.37 percent and 61.04 percent, respectively), *Adolescent Well-Care Visits* (31.15 percent and 39.83 percent, respectively) and *Annual Dental Visits* (34.39 percent and 61.90 percent, respectively).

The study group experienced statistically higher rates for *Childhood Immunization Status Combination 2* (72.07 percent) and *Childhood Immunization Status Combination 3* (70.27 percent) compared to the comparison group (62.17 percent and 58.70 percent, respectively).

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 percent before enrollment in the Demonstration to more than 90 percent in 2015 and 2016. Access to prescription medications increased

following enrollment in the Demonstration for both 2015 (69.24 percent in the six months prior to enrollment; 84.82 percent following enrollment) and 2016 (68.39 percent prior to enrollment; 86.66 percent following enrollment). Ability to access urgent care also increased following enrollment in the Demonstration. In 2015, 94.68 percent of survey respondents indicated that their children had "No Problem" getting urgent care after enrollment in TEFRA, compared with 77.03 percent prior to enrollment. In 2016, a similar increase was observed, with the ability to access to urgent care increasing from 70.48 percent to 94.23 percent 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 percent reporting that they could "Usually" or "Always" obtain care right away and approximately 92 percent 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 percent 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 percent of recipients reported being "Usually" or "Always" satisfied. Overall, 72.0 percent of respondents in 2015 and 72.7 percent 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 3.94 percent in 2016, while the expected rate, based on initial estimates by DMS, was 5.00 percent.

Interim Conclusions

Overall, results from the Arkansas TEFRA-like demonstration waiver interim evaluation were mixed. Rates were significantly lower for the study group for many study indicators (i.e., immunizations for adolescents, well-child visits, and annual dental visits) compared to the comparison group. 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. This disparity suggests that, although the Demonstration has met the needs of the population, room for improvement exists in delivery and provision of care.

Nearly all outcomes-based study indicator results were significantly lower among the study group compared to those in the comparison group. However, the differences observed between the findings may be due to the fact that the study group does not equally match the comparison group. Caution should be used when interpreting comparative results. 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*.

Results from the TEFRA Survey and the Lockout Survey show that recipients reported a high level of satisfaction with the quality of care and access to healthcare services received through the Demonstration. Similarly, results show that recipients' 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.

Future Evaluation Activities

This evaluation report is an interim evaluation covering a limited measurement period. A full evaluation of the TEFRA-like Medicaid Demonstration will be conducted after the current Demonstration period has ended on December 31, 2017. Each research hypothesis will be re-assessed with additional data and extended measurement periods. The full evaluation will include trend analyses not feasible for the interim evaluation.

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,[2-1] 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.

[2-1] 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.

The Arkansas Department of Human Services (DHS), Division of Medical Services (DMS), contracted with Health Services Advisory Group, Inc. (HSAG) to conduct an interim evaluation of Arkansas's 1115 TEFRA-like demonstration waiver.

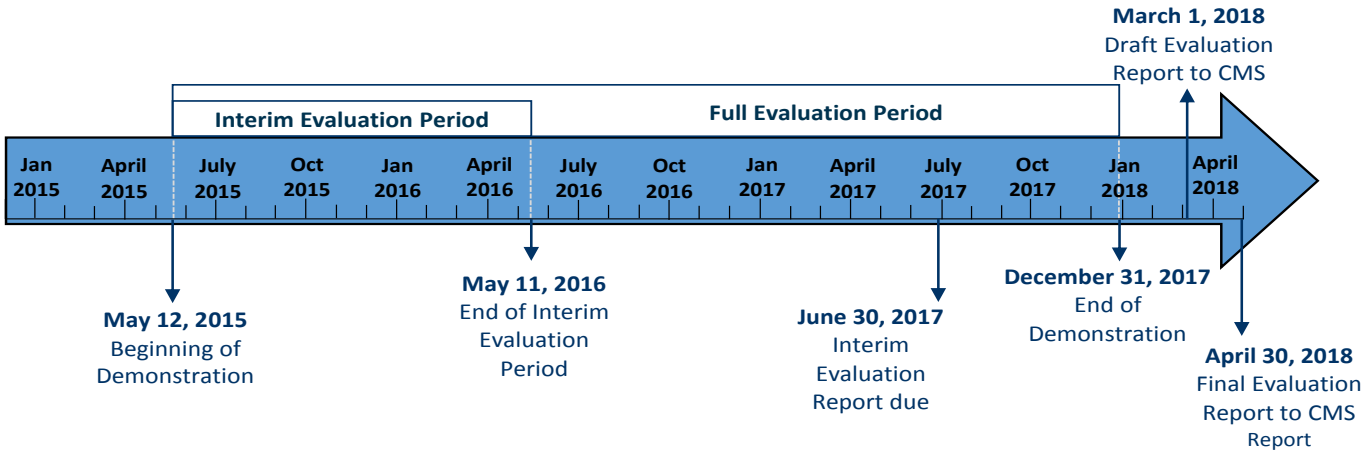
A separate, full evaluation of the Demonstration will be conducted at a date determined by DMS following the end of the current Demonstration waiver extension.

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 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.[3-1] A comparison group comprised of Medicaid ARKids First A (ARKids A) program members was used for select measures.

[3-1] 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 this evaluation, May 12, 2015, through May 11, 2016, 3,707 children participated in the Demonstration.[3-2]

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 to evaluate the Demonstration. Due to the availability of trend data, one hypothesis[3-3] could not be assessed. Trend analyses to assess the additional hypothesis will be included as part of the full evaluation scheduled to follow the current Demonstration period ending

[3-2] The number of beneficiaries participating in the TEFRA-like demonstration from May 12, 2015, through May 11, 2016, according to administrative MMIS data.

[3-3] Hypothesis 2 states: "Access to timely and appropriate preventive care remained the same or improved over time for beneficiaries of the Arkansas TEFRA-like demonstration."

December 31, 2017. The four research hypotheses assessed for the interim evaluation of the Demonstration include:

- 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 the *2016 Arkansas Medicaid TEFRA Beneficiary Satisfaction Survey* and the *2017 Arkansas TEFRA Lockout Beneficiary Satisfaction Survey*.

Administrative Data[3-4]

MMIS/DSS

The MMIS data source is used to collect, manage, and maintain Medicaid recipient 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 and HSAG 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, member demographics, member eligibility, and provider data.

To ensure collection of accurate and complete data, extraction protocols included a three-month lag 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 member demographic files were used to assess member age, gender, and other demographic information. Eligibility files were

[3-4] The original evaluation design included the TEFRA premium payment monitoring data as an administrative data source, but these data were unavailable for this analysis.

used to verify a member's enrollment in the State's Medicaid programs. Finally, the provider data files were used to identify specific practice characteristics for measure calculations. MMIS/DSS data were extracted for members with eligibility dates from May 12, 2015, through May 11, 2016.

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.

Survey Data

TEFRA Beneficiary Satisfaction Survey

A consumer survey (modeled after the Consumer Assessment of Healthcare Providers and Systems [CAHPS®][3-5]) 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®)[3-6] 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.

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.[3-7]

[3-5] CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).
[3-6] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[3-7] 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.

Table 3-1 summarizes the data sources that HSAG used for the Demonstration interim evaluation.

Table 3-1—Data Source Summary

Data Source	Data Owner	Measurement Period[1]
Administrative Data Sources		
MMIS/DSS	DMS	05/12/2015–05/11/2016
AR WebIZ	ADH	05/12/2015–05/11/2016
Survey-Based Data Sources		
2016 TEFRA Beneficiary Satisfaction Survey	DMS/AFMC	2015–2016
2017 TEFRA Lockout Beneficiary Satisfaction Survey	DMS/AFMC	2017

[1] Differences in measurement periods are based on the type of data source and methodology used to obtain data.

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.

Using the best available data and control populations, as appropriate, the evaluation design addresses the impact of study limitations on the findings of the interim evaluation.

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, well-child visits, and dental visits.

The measures were calculated using administrative claims data from the MMIS/DSS and immunization registry data from the AR WebIZ for members enrolled in the Demonstration program or ARKids A program from May 12, 2015, through May 11, 2016. Measure calculations were in accordance with the 2016 HEDIS technical specifications.

Hypothesis 1 was assessed using a chi-square[3-8] 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
Childhood Immunization Status Combination 2
Childhood Immunization Status Combination 3
Immunizations for Adolescents Combination 1

[3-8] Methodology deviates from the original evaluation design; the chi-square test is the appropriate statistical method, based on available data.

Measure Name
Well-Child Visits in the First 15 Months of Life
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
Adolescent Well-Care Visits
Annual Dental Visits

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

Methodology

Hypothesis 2 will test whether access to 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 the evaluation of this hypothesis requirements the collection of baseline data derived from the initial results of Hypothesis 1, the results are not included in the interim report. This hypothesis will be evaluated in the final report when all required data elements are available.

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 will be used for this analysis are May 12, 2015, through December 31, 2017. A measure rate will 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 will 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
Childhood Immunization Status (Combination 2)
Childhood Immunization Status (Combination 3)
Immunizations for Adolescents (Combination 1)
Well-Child Visits in the First 15 Months of Life
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
Adolescent Well-Care Visits

Measure Name
Annual Dental Visits

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.[3-9]

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
Ability to See PCP Pre-TEFRA
Ability to See PCP Post-TEFRA
Ability to Get Medication Pre-TEFRA
Ability to Get Medication Post-TEFRA
Ability to Get Urgent Care Pre-TEFRA
Ability to Get Urgent Care Post-TEFRA

[3-9] Methodology deviates from the original evaluation design. HSAG could not conduct a chi-square test of the differences due to unavailability of individual-level data.

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-test[3-10] 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.)

Table 3-5—Hypothesis 4 Measures

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

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

The number of beneficiaries who experienced a lockout was provided to HSAG by DMS. Based on initial estimates, DMS predicted that 5 percent of Demonstration beneficiaries would experience a lockout. HSAG calculated the percentage of beneficiaries who experienced a lockout using the administrative MMIS/DSS data. A one-sample Z-test for proportions was used to determine whether the

[3-10] Method deviates from original evaluation design. HSAG could not conduct a linear regression due to unavailability of individual-level data.

proportion of beneficiaries who experience a lockout significantly differs from the 5 percent 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
Proportion of Beneficiaries Who Experienced a Lockout

Supplemental Analyses

With the renewal of the Demonstration, 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, 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 percent 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 individuals responded to the Lockout Survey, which is a response rate of 47.26 percent; thus, the 40 percent response rate was achieved.

Study Limitations

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 well-child 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 members 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

Interim Study Findings

Demographic Overview

Demographic characteristics of the study population were derived using administrative data from MMIS/DSS. Overall, 3,707 beneficiaries were enrolled in the Demonstration (i.e., the study group) during the measurement period (i.e., May 12, 2015, through May 11, 2016) compared to 260,450 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 members by selected demographic characteristics for the study and comparison groups.

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	802	21.63	59,898	23.00
5–8 years	1,106	29.84	68,909	26.46
9–12 years	836	22.55	57,350	22.02
13+ years	963	25.98	74,293	28.52
Sex				
Female	1,295	34.93	131,445	50.47
Male	2,412	65.07	129,005	49.53
Race/Ethnicity				
White	2,872	77.48	119,340	45.82
Black/African American	255	6.88	53,791	20.65
Hispanic/Latino	59	1.59	6,502	2.50
Other	203	5.48	33,429	12.84
Unknown	318	8.58	47,388	18.19
Region				
Central	1,436	38.74	62,868	24.14
Northeast	597	16.10	53,467	20.53
Northwest	1,307	35.26	85,047	32.65
Southeast	125	3.37	26,954	10.35
Southwest	242	6.53	32,112	12.33
Unknown	0	0.00	2	0.00

Note: Due to rounding, the sum of the percentages in each column may not equal 100 percent.

The percentage of members in each age group was distributed fairly evenly across the age categories for the study and comparison groups. However, members in the study group were slightly younger when compared with members in the comparison group, with 51.47 percent of the study group being between 0 and 8 years of age, compared to 49.46 percent of the comparison group being between those ages.

Most of the study group were male (65.07 percent) whereas a more equal distribution of females and males was observed among the comparison group (50.47 percent and 49.53 percent, respectively).

Differences in the distribution of members by race and ethnicity were observed across the study populations. While most recipients in both the study and comparison groups were classified as white, the percentage of white members in the study group was 77.48 percent, compared to 45.82 percent of members being classified as white in the comparison group. The percentage of black or African American members was lower among members in the study group (6.88 percent) than among members in the comparison group (20.65 percent). The distribution of Hispanic or Latino members was comparable across the two study populations (1.59 percent for the study group; 2.50 percent for the comparison group). A sizeable percentage of members' race was classified as unknown (8.58 percent of the study group; 18.19 percent of the comparison group).

Most study group participants resided in central (38.74 percent) and northwest Arkansas (35.26 percent). The largest percentage of the comparison group resided in northwest Arkansas (32.65 percent). The percentage of members residing in the southern regions was smaller in the study group than in the comparison group.

The dissimilarities observed between the study group and the comparison group suggest underlying differences between the two populations. 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).

Table 4-2 presents the results from the study indicators used to assess access to healthcare and utilization of services for members enrolled in the Demonstration (i.e., the study group) compared to members enrolled in the ARKids A program (i.e., the comparison group). The HEDIS measures used to assess Hypothesis 1 were calculated for members enrolled in TEFRA and ARKids A from May 12, 2015, through May 11, 2016. Specifically, the table highlights the results among members 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. 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. 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 50th Percentile Comparison[2]	Elig Pop	%	HEDIS 50th Percentile Comparison[2]		
Childhood Immunization Status (Combination 2)	111	72.07	↓	17,820	62.17	↓	9.90*	Met
Childhood Immunization Status (Combination 3)	111	70.27	↓	17,820	58.70	↓	11.57*	Met
Immunizations for Adolescents (Combination 1)	199	49.75	↓	14,093	78.33	↑	-28.58*	Not Met
Well-Child Visits in the First 15 Months of Life[5]	65	*S*[7]	↓	5,435	31.13	↓	*S*[7]	Not Met
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	1,149	28.37	↓	70,460	61.04	↓	-32.67*	Not Met
Adolescent Well-Care Visits	1,130	31.15	↓	85,446	39.83	↓	-8.68*	Not Met
Annual Dental Visits[6]	3,629	34.39	↓	251,750	61.90	↑	-27.51*	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. 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 is considered "*Met*" if the differences in reported rates among the study group were *not significantly lower* than the reported rates among the comparison group (p value <.0.05).

[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 used.

[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 percent versus 78.33 percent), *Well-Child Visits in the Third, Fourth,*

Fifth, and Sixth Years of Life (28.37 percent versus 61.04 percent), *Adolescent Well-Care Visits* (31.15 percent versus 39.83 percent) and *Annual Dental Visits* (34.39 percent versus 61.90 percent).

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

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

	2015					2016				
	Pre-TEFRA		Post-TEFRA		Difference[2]	Pre-TEFRA		Post-TEFRA		Difference[2]
Survey Measure[1]	n	%	n	%		n	%	n	%	
Access to PCP	450	77.45	559	92.24	14.79	564	75.70	720	93.14	17.44
Access to Prescription Drugs	385	69.24	503	84.82	15.58	476	68.39	643	86.66	18.27
Access to Emergency/Urgent Care	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 enrollment (i.e., pre-TEFRA) and after enrollment (i.e., post-TEFRA). The results represent the percentage of recipients 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 percent of respondents indicating that their child had "No Problem" seeing a PCP prior to enrollment in the Demonstration, to over 90 percent reporting "No Problem" in both 2015 (92.24 percent) and 2016 (93.14 percent).

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

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

	2015		2016		Difference[1]	Hypothesis *Met/Not Met*[2]
	n	%	n	%		
Survey Measures—Timely Access						
Getting Care Quickly: Obtaining care right away for an illness/injury/condition[3]	250	97.6	335	95.5	-2.1	Met
Getting Care Quickly: Obtaining care when wanted, but not needed right away[3]	526	92.6	663	92.3	-0.3	Met
Survey Measures—Provider Communication						
How Well Doctors Communicate: Doctors explaining things in an understandable way to your child[4]	250	86.8	338	83.1	-3.7	Met
How Well Doctors Communicate: Doctors listening carefully to you[4]	562	96.6	717	96.8	0.2	Met
How Well Doctors Communicate: Doctors showing respect for what you had to say[4]	561	97.5	716	97.3	-0.2	Met
How Well Doctors Communicate: Doctors spending enough time with the child[4]	558	93.7	710	93.7	0.0	Met
Survey Measure—Global Rating						
Rating of TEFRA[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 recipients whether it was "Always," "Usually," "Sometimes," or "Never" possible to get needed care. Percentage represents the percentage of recipients responding with "Always" or "Usually."
[4] Survey questions asked recipients if doctors "Always," "Usually," "Sometimes," or "Never" communicated well with the beneficiaries and their families. Percentage represents the percentage of recipients 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 recipients 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 recipients' satisfaction in their ability to obtain timely access to care remained high, with 95.5 percent of respondents indicating that they could "Usually" or "Always" obtain care right away for an illness, injury, or condition; and 92.3 percent of respondents indicating that they could "Usually" or "Always" obtain care when wanted, but not needed right away.

Over 83 percent of respondents reported that a doctor usually or always explained things in an understandable way to their child. Furthermore, at least 94 percent of recipients 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 percent in 2015; 96.8 percent in 2016); "Usually" or "Always" showed respect for what they had to say (97.5 percent in 2015; 97.3 percent in 2016); and "Usually" or "Always" spent enough time with their child (93.7 percent in 2015; 93.7 percent in 2016).

The survey measure with the lowest percentage of respondents indicating satisfaction was the overall rating of the Demonstration. However, 72.0 percent of respondents in 2015 and 72.7 percent 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 3,707 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 3.94 percent (n = 146) in 2016, while the expected rate was 5.00 percent (n = 185).

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

	Expected		Observed 2016		Difference[1]	Hypothesis *Met/Not Met*[2]
Survey Measure[1]	n	%	n	%		
Beneficiaries Who Experienced a Lockout	185	5.00	146	3.94	1.06	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.

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 individual 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, recipients 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.
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.

Interim Conclusions

Overall, results from the Arkansas TEFRA-like demonstration waiver interim evaluation were mixed. 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, well-child 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.

Nearly all outcomes-based study indicator results were significantly lower among the TEFRA population compared to children enrolled in 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 recipients' 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, recipients 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.

Future Evaluation Activities

This evaluation report is an interim evaluation, covering a limited amount of time, from the beginning of the most recent Demonstration renewal period. A full evaluation of the TEFRA-like Medicaid Demonstration will be conducted after the current Demonstration period has ended on December 31, 2017. Each research hypothesis will be re-assessed with additional data and extended measurement periods. The full evaluation will include trend analyses not feasible for the interim evaluation.

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 Baseline Value[1]	Measure Population
HEDIS Measures						
Childhood Immunization Status (Combination 2)[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
Childhood Immunization Status (Combination 3)[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; 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

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Baseline Value[1]	Measure Population
Immunizations for Adolescents (Combination 1)[2]	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
Well-Child Visits in the First 15 Months of Life[2]	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	4.62% (6+ visits)	All TEFRA-like and ARKids A beneficiaries
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life[2]	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	28.37%	All TEFRA-like and ARKids A beneficiaries
Adolescent Well-Care Visits[2]	NA	The percentage of beneficiaries 12 through 21 years of age who had at least one well-care visit during the measurement year. The denominator is all beneficiaries 12 through 21 years of age as of the last day of the measurement year. The numerator is all beneficiaries 12	Core Set of Children's Health Care Quality Measures for	NCQA	31.15%	All TEFRA-like and ARKids A beneficiaries

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Baseline Value[1]	Measure Population
		through 21 years of age who had at least one comprehensive well-care visit.	Medicaid and CHIP			
Annual Dental Visits[2]	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	34.39%	All TEFRA-like and ARKids A beneficiaries
TEFRA Beneficiary Satisfaction Survey Measures						
Ability to See PCP Pre-TEFRA[3]	NA	The percentage of survey respondents who reported "No Problem" in seeing a personal doctor or nurse 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 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
Ability to See PCP Post-TEFRA[3]	NA	The percentage of survey respondents who reported "No Problem" in seeing a personal doctor or nurse post-TEFRA. The denominator is all respondents to the post-TEFRA 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
Ability to Get Medication Pre-TEFRA[3]	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 Baseline Value[1]	Measure Population
Ability to Get Medication Post-TEFRA[3]	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
Ability to Get Urgent Care Pre-TEFRA[3]	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
Ability to Get Urgent Care Post-TEFRA[3]	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 post-TEFRA 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
Getting Care Quickly: *Getting Care Right Away for an Illness/Injury/ Condition*[4]	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
Getting Care Quickly: *Getting Care When Wanted, but not Needed Right Away*[4]	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	TEFRA Beneficiary Satisfaction Survey	AFMC	92.3%	All TEFRA Beneficiary Satisfaction Survey respondents

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Baseline Value[1]	Measure Population
		answered that they "Usually" or "Always" obtained an appointment when needed.				
How Well Doctors Communicate: *Doctors Explaining Things in an Understandable Way to Your Child*[4]	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
How Well Doctors Communicate: *Doctors Listening Carefully to You*[4]	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
How Well Doctors Communicate: *Doctors Showing Respect for What You Had to Say*[4]	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
How Well Doctors Communicate: *Doctors Spending Enough Time With the Child*[4]	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

Measure	NQF Number	Description With Numerator and Denominator	Measure Source	Measure Steward	TEFRA-Like Beneficiaries Baseline Value[1]	Measure Population
Rating of TEFRA[4]	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						
Proportion of Beneficiaries Who Experience a Lockout[5]	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	3.94%	All TEFRA beneficiaries
TEFRA Lockout Beneficiary Satisfaction Survey Measure						
Financial Burden of Premium Payment[6]	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] Baseline values are results from the *SFY 2017 TEFRA-Like Section 1115(a) Medicaid Demonstration Extension Evaluation Report*.
[2] Measures were used to assess Hypothesis 1. Data are from MMIS/DSS. Measurement period was May 12, 2015, through May 11, 2016.
[3] Measures were used to assess Hypothesis 3. Results are the 2016 rates from the *2016 Arkansas Medicaid TEFRA Beneficiary Satisfaction Survey*.
[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 were used to assess the supplemental analyses. Data are from the *2017 TEFRA Lockout Beneficiary Satisfaction Survey*.