ARKANSAS TEFRA-LIKE
Section 1115
Project Number 11W001636

Evaluation Design

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ARKANSAS DEPARTMENT OF HUMAN SERVICES

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I. General Background Information

Demonstration Overview

History

The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 gave individual states the option to provide health care benefits to children living with disabilities, and whose family income was too high to qualify for traditional Medicaid. Sometimes called the Katie Beckett Option 1, this program is associated with a child whose experience with viral encephalitis at a young age left her family in financial hardship. If Katie continued receiving treatment at the hospital, she qualified for Supplemental Security Income (SSI) through Medicaid. However, if she were treated at home, her parents' income would make 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 act, 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), which then recommended 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 Demonstration Waiver program. Arkansas' 1115 TEFRA-like Demonstration Waiver was originally approved on October 17, 2002 and implemented on January 1, 2003. Following the initial five-year demonstration period, the program has continued to be renewed. The TEFRA Waiver is a cost sharing Medicaid program that enables certain children with a disability to have care in their homes rather than in an institution. 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.

Current

Original renewal request was provided to Centers for Medicare & Medicaid Services (CMS) on June 30, 2017 for a three-year extension renewal for the TEFRA Demonstration Waiver with no program changes. Initially, as the review/approval process for the extension renewal application had not been completed by the December 31, 2017 end date of the May 12, 2015 – December 31, 2017 demonstration period, CMS first approved through April 30, 2018 an extension of the demonstration. This allowed the state additional time to complete the review/renewal process, and the Special Terms & Conditions (STC) for the new renewal period to be finalized. Thus, on October 18, 2017, Arkansas submitted a follow-up request to extend the demonstration for a three-year period with no program changes. Lastly, CMS approved on May 9, 2018 the demonstration extension request for a period of five years, through the December 31, 2022. Since the initial TEFRA Demonstration Waiver approval in 2003, the state was given the option of only three year renewal periods until the last renewal request when the state was given a five-year renewal option, which the state opted to accept. Overall, the TEFRA extension renewal was approved on May 9, 2018 for a demonstration period from May 9, 2018 – December 31, 2022.

In accordance with CMS' demonstration requirement, the Arkansas Division of Medical Services (DMS) must develop an evaluation design for the TEFRA-like demonstration no later than 120 days following demonstration approval from CMS (STC 47). The draft evaluation design is built on exploratory analysis performance metrics using latest claims-based data available during January 1, 2016 – December 31, 2016 and satisfaction survey outcomes.

Demonstration Goals

The purpose of the evaluation design is to assess the impact of the demonstration on the quality and affordability of health care for all children eligible for the program. The evaluation design will explore and evaluate the effectiveness of the demonstration for each research hypothesis, as approved by CMS. Arkansas will continue to test the following four goals during the demonstration, which CMS and Arkansas expects will continue to promote Medicaid program objectives.

- ***Goal 1:*** *Ensuring that demonstration enrollees have equal or better access to health services compared to the Medicaid fee-for-service population.*
- ***Goal 2:*** *Ensuring demonstration enrollees have access to timely and appropriate preventive care.*
- ***Goal 3:*** *Ensuring enrollment in the demonstration increases beneficiaries' perceived access to health care services and experience in the quality of care received.*
- ***Goal 4:*** *Ensuring premium contributions are affordable, do not create a barrier to health*

care access, and that the proportion of beneficiaries who experience a lockout period for nonpayment of premiums is relatively low.

As illustrated in the "Methodology" section, each research hypothesis includes one or more evaluation design metrics. Included in the evaluation design will be examinations of the demonstration's performance on a set of outcome and satisfaction metrics over time and relative to a comparable population in the Arkansas Medicaid program, where applicable. Each metric will be described and include a description of the numerator and denominator, the sources of data, and the analytic method used to test the hypotheses. Both cross-sectional and sequential trend analyses will be used, depending on whether the metric is across one point in time or multiple points in time, along with the specific research hypothesis being addressed.

Target Population

The target population will include all beneficiaries covered under Title XIX of the Social Security Act in the State of Arkansas, ages 18 or younger, who meet the medical necessity requirement for institutional care, have income that is less than the long-term care Medicaid limit, and do not have countable assets greater than $2,000.

The target population will include enrolled TEFRA-like beneficiaries meeting all of the following eligibility criteria:

a) Child must be age 18 or younger,
b) Child must meet the Social Security Administration's definition of disability,
c) Child must be a U.S. citizen or qualified alien,
d) Child must have established residency in the state of Arkansas,
e) Child must have a Social Security Number or have applied for one,
f) Child's annual gross countable income must be less than the current Medicaid State Plan income limit established for long-term care services, in accordance with section 1902(a)(10)(A)(ii)(V) of the Act (i.e., the child would be Medicaid eligible if institutionalized),
g) Child's countable assets do not exceed $2,000 (parent(s) assets are not considered),
h) Child meets the medical necessity requirement for institutional placement, or level of care, or be at risk, in the future, for institutional placement, and
i) If eligibility criteria a – h is met, the child must also have access to medical care in the home, it must be deemed appropriate to provide such care outside an institution, and the estimated cost of care in the home must not exceed the estimated cost of care if the child were in an institution.

Due to the TEFRA-like program characteristics, Medicaid may serve as a secondary payer for some of the covered beneficiaries in the target population, which could include cases of third-party liability (TPL). The evaluation design will explore which proportion of the target population is TPL and the range of impact throughout the state.

Comparison Populations

A comparison population for select evaluation design metrics on claims-based outcomes and metrics will consist of Medicaid non-TEFRA-like program beneficiaries. This comparison population will include similar age and beneficiary diagnosis characteristics, as described under criteria (g) below, as TEFRA-like population. Analyses were conducted for the claims-based comparison population to focus on program level, similar beneficiary primary diagnosis conditions and ages. Under DMS Medical Director's guidance, clinical review was performed on the selection of primary diagnosis conditions of five behavioral health conditions[1] and four medical conditions[2]. The purpose of the selection was to identify TEFRA-like beneficiaries primary diagnosis conditions of characteristics beneficiary primary diagnosis conditions and apply to Medicaid fee-for-service population to include as non-TEFRA-like population. The claims-based comparison population of enrolled Medicaid non-TEFRA-like will include beneficiaries who meet the following criteria:

a) Child must be age 18 or younger,

b) Child must be a U.S. citizen or qualified alien,

c) Child must have established residency in the state of Arkansas,

d) Child must have a Social Security Number or have applied for one,

e) Child must have continuous enrollment of Medicaid non-TEFRA-like program,

f) Not enrolled in TEFRA-like program 12 months prior/post evaluation measurement periods, and

g) Child must be identified in at least one of the nine selected primary diagnosis conditions of the following: *Child/ Adolescent Emotional Disorders, Other Congenital Anomalies, Attention Deficit Hyperactivity Disorders, Anxiety/ Nonpsychotic Disorders, Mood Disorders, Nervous System Congenital Anomalies, Cardiac and Circulatory Congenital Anomalies, Adjustment Disorders, and Hereditary and Degenerative Nervous System Conditions*

[1] Child/ Adolescent Emotional Disorders, Attention Deficit Hyperactivity Disorders, Mood Disorders, Anxiety/ Nonpsychotic Disorders, and Adjustment Disorders.

[2] Other Congenital Anomalies, Nervous System Congenital Anomalies, Cardiac and Circulatory Congenital Anomalies, and Hereditary and Degenerative Nervous Sys Conditions.

In researching comparison populations, the Developmental Disabilities Services (DDS) program was studied but there was evidence to indicate DDS beneficiaries were also included in TEFRA-like program. DDS has no age limit on services provided. It was concluded that DDS population would have overlap of beneficiaries between the TEFRA-like population and DDS population, thus would lead to confounding comparisons between the two populations. In the state's previous demonstration evaluation design ARKids A population was used as the comparison population. Since ARKids A provides health insurance to children who qualify based on family income level and would not have similar beneficiary diagnosis characteristics as the TEFRA-like population, we have determined to no longer consider this group as a reasonable comparison group for this evaluation design. Instead, DMS wants to determine if the TEFRA-like population have equal or better access to health services compared to beneficiaries with similar diagnosis beneficiary characteristics from Medicaid fee-for-service population.

Exploratory Analysis of Target and Comparison Populations

DMS contracted with a vendor to gather and analyze exploratory data to help formalize the TEFRA-like evaluation design. Calendar year 2016 (January 1, 2016 – December 31, 2016) constitutes the measurement period for the exploratory analysis of this evaluation design. This analysis was vital in determining relevant hypotheses, research questions, and development of Arkansas specific homegrown metrics in the evaluation design process for the TEFRA-like population.

Target Population

Descriptive findings on the demographic and eligibility characteristics of the TEFRA-like population help understand not only the demonstration population more fully but also provides useful contextual information that will facilitate interpretation of evaluation design findings. A total of 5,588 beneficiaries were identified having at least one TEFRA-like segment during the measurement period of CY2016. Of the TEFRA-like beneficiaries, 99% had at least one TEFRA segment during the measurement period. Almost 70% of population were enrolled for at least 11 months out of the year (n = 3,841 beneficiaries) in TEFRA-like coverage. Over 50% of the TEFRA-like population were between the ages of two and ten as of December 31, 2016. Almost two-thirds of the TEFRA-like population were male. An examination of additional demographic characteristics among the TEFRA-like population revealed that the majority were white (75%; n = 4,166), and nearly 74% lived in the Northwest and Central regions. The median number of TEFRA-like beneficiaries that have been enrolled for less than 12 months is 162 during the CY2016 measurement period.

Using CY2016 Arkansas claims from the TEFRA-like population on primary ICD-10 diagnosis codes, the clinical characteristics of the target group were explored. Primary diagnosis codes were grouped together by level of condition such as *Other Congenital Anomalies,* then characterized by either a

medical or behavioral health condition type. Primary diagnosis groups of 253 medical conditions and 15 behavioral health conditions of administrative claims were analyzed to assess the appropriateness of similar beneficiary comparison group options. This exploratory analysis further aided in the development of the next section, Evaluation Hypotheses and Research Questions of the evaluation design.

Twelve medical and six behavioral health conditions were selected based on the top volume of primary diagnosis conditions from the TEFRA-like population. An analytical review on the number and percentage of claims for these 12 medical and six behavioral health conditions were calculated to obtain a majority of claims from both medical and behavioral health condition types. Per DMS Medical Director's guidance, this list of conditions was narrowed to five behavioral health conditions (see **footnote 1**) and four medical conditions (see **footnote 2**). Over 57% of claims from the non-TEFRA-like beneficiaries account for the five selected behavioral health conditions and four selected medical conditions.

This comparison group will be used on relevant claims-based settings for selected hypotheses under the next section. This will allow the state on specific evaluation design outcomes and metrics to compare TEFRA-like population to non-TEFRA-like population with similar beneficiary primary diagnosis conditions.

Table 1 displays beneficiary counts for the four medical and five behavioral health conditions described above based for selected primary diagnosis conditions. Some beneficiaries could have more than one primary diagnosis condition assigned but almost 1,000 (n = 990) of the TEFRA-like population have *Child/Adolescent Emotional Disorders* and almost 800 (n = 793) have *Other Congenital Anomalies.* The behavioral health condition of *Attention Deficit Hyperactivity Disorders* accounts for 14% of the primary diagnoses in the target group and over 50% in the comparison group. Ranked second on primary diagnosis groupings for the non-TEFRA-like beneficiaries is *Mood Disorders* affecting 27% of the population, which on the other hand affects only 5% of the TEFRA-like population.

Also, the two behavioral health conditions of *Anxiety/ Nonpsychotic Disorders* and *Adjustment Disorders* affects 18% and 17% of the non-TEFRA-like population, respectively.

Table 1. Number and Percentage of Beneficiaries on Selected Primary Diagnosis Conditions

Selected Primary Diagnosis Condition	Condition Type	# of TEFRA-Like Beneficiaries	% of TEFRA-Like Beneficiaries	# of Non-TEFRA-Like Beneficiaries	% of Non-TEFRA-Like Beneficiaries
Child/ Adolescent Emotional Disorders	Behavioral Health Condition	990	17.72	6,779	7.27
Other Congenital Anomalies	Medical Condition	793	14.19	7,527	8.08
Attention Deficit Hyperactivity Disorders	Behavioral Health Condition	772	13.82	46,937	50.37
Anxiety/ Nonpsychotic Disorders	Behavioral Health Condition	388	6.94	16,419	17.62
Mood Disorders	Behavioral Health Condition	298	5.33	24,861	26.68
Cardiac and Circulatory Congenital Anomalies	Medical Condition	283	5.06	3,466	3.72
Nervous System Congenital Anomalies	Medical Condition	192	3.44	997	1.07
Adjustment Disorders	Behavioral Health Condition	102	1.83	15,500	16.63
Hereditary and Degenerative Nervous Sys Conditions	Medical Condition	59	1.06	489	0.52

In addition, the volume of TEFRA-like beneficiaries receiving occupational, physical and speech-language pathology therapy services during CY2016 was examined. Findings show that at most 54% of TEFRA-like population had at least one therapy service and majority of beneficiaries were between three to 11 years of age (see **Table 2**). Beneficiaries covered by the TEFRA-like demonstration are eligible because of their significant health conditions; therefore, analyzing the distributions of characteristics related to health conditions types and selected diagnosis groupings helps frame the therapy utilization characteristics already presented, as well as other aspects of the evaluation design.

Table 2. TEFRA-Like Beneficiary Frequency by Age for Therapy Services

Therapy Services	1 – 2 Years of Age	3 – 6 Years of Age	7 – 11 Years of Age	12 – 15 Years of Age	16 – 18 Years of Age	Total # of TEFRA-Like Beneficiaries (%)
Occupational Therapy	324	1,348	925	334	126	**3,057 (54%)**
Physical Therapy	305	1,085	692	281	131	**2,494 (44%)**
Speech Therapy	306	1,311	792	300	105	**2,814 (50%)**

Comparison Population

For an accurate comparison to the TEFRA-like population on claims-based outcomes (as described in **Table 1**), beneficiaries who are not enrolled in TEFRA-like services but are enrolled in Medicaid with similar medical and behavioral health conditions (selected primary diagnosis conditions) will be used as a comparison population. Additionally, this comparison population will capture those beneficiaries enrolled in Medicaid not responsible for paying TEFRA premiums for their Medicaid coverage. Ninety-seven percent of non-TEFRA-like population had at least one Medicaid segment during January 1, 2016 - December 31, 2016 measurement period. Equivalent findings for the non-TEFRA-like population of children ages 19 and under were observed on the length of Medicaid segments. The majority of the population had 12-month enrollment during the year on Medicaid segments. With respect to demographic characteristics, 42% of non-TEFRA-like population were females and the majority were between the ages of 5 and 16, 48% were white[3], and 74% resided in the Northwest and Central parts of the state.

II. Evaluation Hypotheses and Research Questions

Driver Diagram

In order to effectively assess if the demonstration is achieving each of the state's four goals, we need to develop a strong evaluation design. An important part of that process is to develop a driver diagram to help depict clearly the fundamental relationship between the primary drivers, secondary drivers, and ultimate aims of the demonstration. In order to provide a visual display of DMS's theory of what "drives" or contributes to the achievement of the demonstration goals, a driver diagram is provided in **Appendix A**. One of the primary drivers contributing directly to achieving *Goal 1 of Ensuring that demonstration enrollees have equal or better access to health services compared to the Medicaid fee-for-service population* is proportion of days covered for prescriptions, which in turn

[3] And another 29% unknown, 15% black/African American, and 8% other.

might be driven by factors such as average cost per prescription per beneficiary and prescription per beneficiary per month (PBPM) – regarded as the secondary drivers for the ultimate aim in this depiction. One moderating factor to examine is third-party liability (TPL) coverage of enrolled TEFRA-like beneficiaries. Based upon exploratory analysis, over 67% of the TEFRA-like beneficiaries have TPL coverage during CY2016 measurement period. This is vastly different compared to the corresponding rate for the Medicaid non-TEFRA-like beneficiaries at 6% in CY2016. TPL coverage could have an impact on metric calculations and when comparing to Medicaid non-TEFRA-like beneficiaries.

Evaluation Hypotheses and Research Questions

The TEFRA-like demonstration's four goals showcase the Centers for Medicare & Medicaid Services' (CMS) three-part aim of better care for individuals, better health for population and lower costs. The ultimate success of those goals will be evaluated through the deploying the evaluation design, which is organized around nine hypotheses and 28 research questions.

Goal 1: Ensuring that demonstration enrollees have equal or better access to health services compared to the Medicaid fee-for-service population

DMS's mission statement is, "To ensure that high-quality and accessible healthcare services are provided to citizens of Arkansas who are eligible for Medicaid or Nursing Home Care." This statement aligns with the intent of evaluating the success of the demonstration by analyzing health services used by the TEFRA-like beneficiaries compared to the non-TEFRA-like beneficiaries. Primarily, under Goal 1 the evaluation will assess the utilization rates of speech, occupational, and physical therapy services of TEFRA-like beneficiaries, on how these rates are similar or better compared to those for non-TEFRA-like beneficiaries. Goal 1 has two hypotheses and eight research questions.

Hypothesis 1.1: ***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 Non-TEFRA-like).***

Research Questions for Hypothesis 1.1

1.1a. What are the claim-based rates of TEFRA-like beneficiaries for speech, occupational, and physical therapy services? Does demographics have an impact on the access to health services for speech, occupational, and physical therapy services?

1.1b. How do claims-based utilization rates for therapy service compare to TEFRA Satisfaction Survey scores of getting speech, occupational, and physical therapies?

1.1c. How does PCP access look for TEFRA-like beneficiaries? What age group is the lowest and highest utilizers to preventive care?

Hypothesis 1.2: ***The beneficiaries of the Arkansas TEFRA-like demonstration have equal or better proportion of days covered for prescriptions compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).***

Research Questions for Hypothesis 1.2

1.2a. How does TEFRA-like beneficiaries prescriptions coverage change over time?

1.2b. What geographic regions of the state for TEFRA-like beneficiaries have both low and high access to health services on at least two prescriptions and who achieved a PDC of at least 50%?

1.2c. Are TEFRA-like beneficiaries seeing a change in the level of cost based on the average cost of prescription (Rx) per beneficiary over time?

1.2d. Are TEFRA-like beneficiaries receiving similar or better (Rx) per beneficiary per month (PBPM)?

1.2e. Do TEFRA-like beneficiaries maintain refills on seizure medications over time?

Goal 2: Ensuring demonstration enrollees have access to timely and appropriate preventive care

Under goal 2, frequency of gaps in TEFRA-like coverage and the average length (in months) a TEFRA-like beneficiary is enrolled will be examined. An incentive for a patient to enroll under the TEFRA-like program is to receive the services of speech, occupational, and physical therapy. The state will review the percent of newly enrolled TEFRA-like beneficiaries receiving therapy services within 60 days of enrollment. A marker for timely preventative care will be beneficiary's experience of obtaining care right away. As described in the "Driver Diagram" section, the majority of TEFRA-like beneficiaries have third-party liability coverage, and therefore, the state will research what parts of the state have high and low percentages of TPL coverage. Another indicator for appropriate preventative care is to examine the percent of TEFRA-like beneficiaries who have durable medical equipment coverage. Goal 2 has three hypotheses and eight research questions.

Hypothesis 2.1: **P*reventive care services for newly enrolled beneficiaries of the Arkansas TEFRA-like demonstration are similar or better over time.***

Research Questions for Hypothesis 2.1

2.1a. How soon after enrollment are newly enrolled TEFRA-like beneficiaries getting access to first health care PCP visit?

2.1b. What is the rate of newly enrolled TEFRA-like beneficiaries receiving speech, occupational, and physical therapies within a certain number of days from enrollment?

2.1c. What is the average length (in months) of TEFRA-like segments within the measurement period?

Hypothesis 2.2: ***The beneficiaries of the Arkansas TEFRA-like demonstration have equal or higher rates of third-party liability (TPL) coverage of appropriate preventive care compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).***

Research Questions for Hypothesis 2.2

2.2a. What are the rates of third-party liability (TPL) coverage?

2.2b. Are TEFRA-like beneficiaries who have TPL receiving preventive care with a PCP visit?

2.2c. What geographic regions of the state have high percentages of TPL coverage? What geographic regions of the state have low percentages of TPL coverage?

Hypothesis 2.3: ***The beneficiaries of the Arkansas TEFRA-like demonstration have equal or higher rates of durable medical equipment (DME) coverage of appropriate preventive care compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).***

Research Questions for Hypothesis 2.3

2.3a. Do TEFRA-like beneficiaries have equal or higher rates of durable medical equipment (DME) coverage?

2.3b. What are the top five primary diagnosis conditions/codes and condition types for TEFRA-like beneficiaries who have durable medical equipment (DME) coverage?

Goal 3: Ensuring enrollment in the demonstration increases beneficiaries' perceived access to health care services and experience in the quality of care received

Patient experience with the TEFRA-like demonstration program over time will be assessed by analyzing responses from the TEFRA Beneficiary Satisfaction Survey domains of “Getting care quickly”, “How well doctors communicate”, and “Overall health care”. In addition, the percentage of TEFRA-like beneficiaries who have DME will be compared to Consumer Assessment of Health Care Providers and Systems (CAHPS®)-like survey domain score of “Special equipment and supplies”. An indicator of comparing the TEFRA-like plan with other health plans, will be used to investigate the impact on patient experiences on health care services. This will be determined by comparing responses pre enrollment of six months to post enrollment in the TEFRA-like program.

Goal 3 has two hypotheses and six research questions.

Hypothesis 3.1: ***Patient experience for the quality of care and access to health care services received by the beneficiaries in the Arkansas TEFRA-like demonstration has remained the same or improved over time.***

Research Questions for Hypothesis 3.1

3.1a. Have TEFRA-like beneficiaries' experience scores of getting care quickly improved or stayed the same over time?

3.1b. Do TEFRA-like beneficiaries have confidence in how well doctors communicate?

3.1c. Is the overall health care rating showing improvement over time?

Hypothesis 3.2: ***Patient's experience with access to health care services improve with enrollment into TEFRA-like program.***

Research Questions for Hypothesis 3.2

3.2a. Are TEFRA-like beneficiaries' experiencing better access to health care when seeing a personal doctor or nurse with enrollment into TEFRA-like program?

3.2b. Are TEFRA-like beneficiaries' experiencing better pharmacy access on prescription medications with enrollment into TEFRA-like program?

3.2c. Are TEFRA-like beneficiaries' experiencing any problems when needing urgent care access with enrollment into TEFRA-like program?

Goal 4: Ensuring premium contributions are affordable, do not create a barrier to health care access, and that the proportion of beneficiaries who experience a lockout period for nonpayment of premiums is relatively low

How much of a financial burden of the TEFRA-like premiums will be is an important way to gauge beneficiaries experience on health care access and financial impact. This will be analyzed from respondents perceiving premiums as a financial burden from the TEFRA Beneficiary Satisfaction Survey. Also, the reported TEFRA-like premium range will be studied over time to access the differences for respondents paying the program premiums as a financial burden. Goal 4 has two hypotheses and six research questions.

Hypothesis 4.1: ***Premium barriers for TEFRA-like beneficiaries will remain stable over time.***

Research Questions for Hypothesis 4.1

4.1a. What is the percentage of TEFRA-like beneficiaries experiencing a premium barrier?

4.1b. How does the premium range differ of those experiencing a premium barrier?

Hypothesis 4.2: ***Reduce the number of reasons why Arkansas TEFRA-like beneficiaries' cases were closed due to program barriers of health care access.***

Research Questions for Hypothesis 4.2

4.2a. What are the top five reasons why Arkansas TEFRA-like beneficiaries' cases were closed?

4.2b. How does patient perception of 'getting care quickly' during lockout periods compare with similar perceptions among enrolled patients?

4.2c. How difficult it is to get speech, occupational, and physical therapy during lock-out period?

4.2d. What are the types of medical services that were not met for patients experiencing a lockout period? How does this patients experience vary by common diagnosis?

III. Methodology

Evaluation Design Summary

Arkansas will analyze the hypotheses and drivers described in **Appendix B** to address the four goals as listed in the approved Special Terms and Conditions (STCs) document. By examining the hypotheses and research questions listed in the "Evaluation Hypotheses and Research Questions", we will assess the performance of the demonstration and its potential effect on TEFRA-like population. As illustrated in **Appendix C**, each hypothesis includes two or more research questions which then help assess the desired evaluation outcome and metric. Wherever feasible, survey-based outcomes (more on surveys discussed below) will be in a standardized form comparable to and compared against national values. The evaluation design will exam demonstration's performance on a set of outcomes and metrics along with beneficiary's experience scores over accessibility, therapy services, overall health care, financial burden on TEFRA-like premiums and other relevant scores. DMS and the evaluation contractor will use multiple sources of data for the nine hypotheses and 28 research questions. The evaluation design will provide details of data sources on collected data for both administrative and CAHPS or CAHPS-like survey-based data. The analytic methods will offer quantitative or qualitative approaches to answer the research questions. Both cross-sectional and sequential trend analyses will be used depending on whether the outcome or metric is observed across one point in time or multiple points in time.

Target and Comparison Populations

The target population will include all beneficiaries covered under Title XIX of the Social Security Act in the State of Arkansas, ages 18 or younger, who meet the medical necessity requirement for institutional care, have income that is less than the long-term care Medicaid limit, and do not have countable assets greater than $2,000. The comparison population will include similar age and beneficiary diagnosis characteristics as the TEFRA-like population, which will be used for selected claims-based outcomes and metrics. For additional information of the target and comparison populations, please refer to the "General Background Information" section. A consideration for establishing a comparison group with TEFRA or TEFRA-like programs is to pull relevant material from other states. This material will be reviewed regularly and included within the subsequent evaluation report as a reference list, which will serve as background information.

Evaluation Period

The interim evaluation report will be submitted to CMS on June 30, 2021 and summative evaluation report will be provided by June 30, 2024. The observation period of interest will include the years 2018 – 2022 for both claims-based and survey reporting timeframes with the time origin representing over five months prior to the demonstration renewal on May 9, 2018. The measurement period for the interim evaluation report will be years 2018 – 2019 and summative (final) evaluation report will be years 2018 – 2022. **Appendix C** includes more information on dates of service to be included in both the interim and summative evaluations reports as listed on "Measurement Period" row for each metric table.

Data Sources

The Arkansas Division of Medical Services (DMS) and its contractor will use multiple sources of data to assess the research hypotheses. The evaluation design will leverage claims-based administrative data, enrollment data and survey-based scores, as applicable. Administrative data sources include information extracted from DMS' Medicaid Management Information System (MMIS). Accurate and timely data reporting is essential in order for the TEFRA-like evaluation to be successful in achieving its goals of accessibility to health services, beneficiary experience in program and affordable premiums. In order to meet this requirement, the contractor will use its own Arkansas Medicaid Data Warehouse, vendor approved priority warehouse system. Data analytics will be performed without direct engagement from the State, as to avoid biased opinion or skewed results. The data evaluator will run the analytics and provide data as necessary for the analysis. Data from administrative claims will be used and will not alter input data or the output of results.

Administrative Data

The Medicaid Management Information System (MMIS) data source is used to collect, manage, and maintain Medicaid beneficiary files (i.e., eligibility, enrollment, and demographics) and fee-for-service (FFS) claims. Use of FFS claims will be limited to final, paid status claims. Interim transaction and voided records will be excluded from all evaluations, because these types of records introduce a level of uncertainty that can impact reported rates. The contractor will use raw, full sets of Medicaid data, which is provided on a weekly basis consisting of claims, provider, beneficiary, and pharmacy data subject areas. To ensure accurate and complete data, the contractor's Arkansas Medicaid Data Warehouse will utilize the pre-snapshot data claims process and will require a minimum three-month lag to allow time for the majority of claims to be processed through the MMIS. The contractor will use fee-for-service claims and follow Healthcare Effectiveness Data and Information Set (HEDIS®) or CMS Core Set national specifications for national metrics. Applicable claim types, such as institutional, professional, and pharmacy claims will be used to calculate the various evaluation design metrics while beneficiary demographic files will be used to assess beneficiary age, gender, and other demographic information. Eligibility files will be used to verify a beneficiary's enrollment in the State's Medicaid programs. Each metric (see **Appendix C**) associated with each research hypothesis lists the data source(s) used in addressing it.

Survey Data

TEFRA Beneficiary Satisfaction Survey

The TEFRA Beneficiary Satisfaction Survey is designed and based on the CAHPS® 5.0H Medicaid Child survey and covers topics such as getting care quickly, how well doctors communicate, and access to care, among others. This instrument can include specific survey items designed to elicit information that addresses research hypotheses regarding the financial burden of the program and access to medical equipment and medical therapies. On an annual basis, the TEFRA Beneficiary Satisfaction Survey (TEFRA survey) has been conducted by the Arkansas Division of Medical Services (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®) survey vendor. All beneficiaries in the TEFRA-like demonstration will be included in the analyses. The TEFRA survey will follow a traditional NCQA sampling strategy—1,650 beneficiaries will be randomly selected from the Medicaid Management Information System (MMIS). To be eligible for the study, beneficiaries must be enrolled in the program for at least six months, with no more than one 30-day gap in enrollment.

TEFRA Disenrollee Beneficiary Survey

The survey vendor also conducted a TEFRA Disenrollee Beneficiary Survey, which is administered on as needed basis and is a CAHPS-like survey. Survey was modeled after the CAHPS® 5.0H Medicaid Child survey. This additional survey was first conducted in 2018 by AFMC and used to assess the impact of premium contributions by asking additional questions of beneficiaries who were disenrolled from the program. Results provided important information about TEFRA premiums and the experiences of those who lost TEFRA coverage. The disenrollee survey looks at the reasons TEFRA beneficiaries were disenrolled and if disenrollment was voluntary. Beneficiaries who had a break of at least one month in previous year's premium payments were identified. This included all TEFRA beneficiaries with premium payment amounts ranging from $0 to $458. TEFRA beneficiaries who showed premium payments for all 12 months in previous year were excluded from the population. The sample was de-duplicated by one beneficiary per household where the youngest beneficiary was utilized for survey purposes.

Medicaid ARKids A and ARKids B Beneficiary Surveys

For additional survey outcomes, two other surveys overseen by the survey vendor will be used as potential sources of data for plausible comparison groups. The ARKids First A and ARKids First B beneficiary survey results and applicable national rates will be addressed.

The ARKids First A beneficiary survey is a CAHPS® 5.0H Medicaid Child survey and is currently conducted every two years. Thus, monitoring results provided during the year ARKids First A not being conducted will include previous survey year's results. The CAHPS 5.0H Medicaid child survey has included five composite measures, four rating questions, two question summary rates and five effectiveness of care measures. NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Due to the state's enrollment data being reported monthly, the survey vendor set the criteria at 30 days. The sampling frame for children consisted of all ARKids First A Arkansas Medicaid primary care case management (PCCM) enrollees who were 17 years old or younger as of the end of the reported calendar year. The child beneficiaries' six-month continuous enrollment began six months prior to the reported calendar year. Beneficiaries selected within the last 24 months were excluded from the population and only one beneficiary per household was selected.

The beneficiary satisfaction survey for the ARKids First B is a CAHPS-like survey and is currently conducted on an annual basis. The survey was adopted using HEDIS/CAHPS® guidelines and protocol, from the CAHPS 5.0H survey to assess beneficiaries' experiences with their health plans.

The ARKids First B beneficiary survey has included five composite measures, six rating questions and two summary rates. Survey vendor used a systematic sampling method as provided by NCQA's protocol for administering HEDIS/CAHPS surveys. Similar to ARKids First A, the criteria at 30 days was used because the enrollment data are reported monthly. The sampling frame consisted of all ARKids First B PCCM enrollees ages 17 and younger as of the end of the reported calendar year. The beneficiaries' six-month continuous enrollment began six months prior to the reported calendar year. Beneficiaries selected for other surveys within the last 12 months were excluded from the population this year, and only one beneficiary per household was selected.

Medicaid Survey Comparison

A comparison group for selected metric on the survey-based questions (i.e. timely and appropriate preventive care) will use a variety of state driven beneficiary satisfaction surveys. As an example, selected composite (i.e. *Getting care quickly* and *How well doctors communicate*) and individual scores (i.e. *Rating of health care*) from TEFRA beneficiary survey results if applicable will be compared to ARKids First A and First B beneficiary survey results. Also, TEFRA disenrollee beneficiary survey results, if available, will be compared to TEFRA beneficiary survey results in the domain of *Special equipment and supplies*. When possible, evaluation survey results will incorporate national survey results provided by National CAHPS Benchmarking Database (NCBD) for comparison purposes (see **Appendix C**, under "National Benchmark" row for applicable metrics). The NCBD is a national repository funded by Agency for Healthcare Research and Quality (AHRQ) containing data from the CAHPS health plan survey to provide comparative data on health plans.

Analytic Methods

The evaluation design will use univariate and bivariate analyses to test the hypotheses associated with the goals of the TEFRA-like program and related research questions. Univariate analyses will be used to compute metrics such as central tendency (i.e., mean, mode, and median), spread (i.e., range, variance, max, min, quartiles and standard deviation) and frequency distributions. The evaluation design will discuss the generalization of results in the context of data limitations. Statistical testing such as t-tests, chi-square testing with 95% confidence intervals will be utilized and regressions analysis will be reviewed in the evaluation design to determine differences and correlations, as feasible. **Appendix C** specifies the comparison strategies, descriptions of outcomes and metrics, high-level technical specifications, data sources, and analytical approaches for each hypothesis. Appropriate statistical analyses will be selected for each hypothesis.

The two main analytic methods used to determine whether the beneficiaries in the TEFRA-like population are doing as well or better than non-TEFRA-like Medicaid beneficiaries in the traditional Medicaid program with the selected primary diagnosis conditions on the various metrics in the evaluation are cross-sectional analysis, such as the t-test and longitudinal data analysis, such as linear mixed models. The t-test will be used for TEFRA-like vs. non-TEFRA-like single group methods of assessment as well as for cross-sectional comparisons of two groups at one point in time. A chi-squared test will be used to compare the proportion of respondents' experience on selected questions from TEFRA Beneficiary Satisfaction Survey compared to similar questions from Medicaid ARKids A and ARKids B Beneficiary Surveys. The longitudinal nature of the data will be exploited to establish trends in outcomes for the TEFRA-like population trend.

Evaluation Outcomes and Metrics

Appendix C exhibits the evaluation design outcome and metric description names along with numerator and denominator descriptions. If applicable for benchmarking, analysis will use data from publicly available national surveys. Outcomes such as quality of care, access to health care, health outcomes, and beneficiary experience will be examined. In learning from previous evaluation design results and experience of state specific data, Arkansas has value-added components to its current evaluation design. For example, Arkansas included specific TEFRA-like DMS homegrown metrics for evaluation design approach (see **Appendix C** Metric 2.2a as an example). TEFRA-like population homegrown metrics were developed with oversight from Arkansas' Medical Director and driven from exploratory analysis of CY2016 findings. Also, Arkansas will use national selected evaluation design metrics as provided in CMS' Core Set of Health Care Quality Measures for Children in Medicaid and CHIP[4] and Pharmacy Quality Alliance (PQA-like)[5] sources.

IV. Special Methodological Considerations

The demonstration evaluation from the perspective of beneficiaries provides an opportunity to understand the impact of services that improve or maintain a child's health, or prevent a child's health from getting worse. Two methodological considerations that have impacted our choice of evaluation approaches include: 1) the long standing nature of the TEFRA-like program with a lack of baseline data, and 2) the difficulty of identifying a comparison group for the specificities of the target population. Since the program was launched many years ago, a true baseline in which a similar group can be compared year over year is difficult to establish. Additionally, since the program has a

[4] Centers for Medicare & Medicaid Services, Children's Health Care Quality Measures. https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html.
[5] Pharmacy Quality Alliance. https://www.pqaalliance.org/pqa-measures.

very specific population of TEFRA-like beneficiaries, the complexity of determining a true comparison population is challenging. The target population consists of a small sample size of less than 6,000 beneficiaries. As such, the comparative methods are descriptive and will include survey comparisons of TEFRA beneficiary survey results to ARKids First A and First B beneficiary survey results. If feasible, evaluation survey results will incorporate national survey results provided by the National CAHPS Benchmarking Database (NCBD) for comparison purposes.

Methodological Limitations

The evaluation design has limitations on the lack of a truly comparative TEFRA-like population for selected metrics. TEFRA-like enrollees may not have prior Medicaid coverage, thus there are limitations around baseline values for the evaluation design metrics. The design will treat Year 1 of the current demonstration period of performance, 2018, as a baseline from which to measure changes over the course of the demonstration, and will analyze survey scores on patient's health care plan experience in the six months before enrolling in TEFRA (pre-TEFRA) compared to post enrollment in the TEFRA health plan (post-TEFRA). The evaluation will also conduct an in-state analysis comparing TEFRA-like population to a group with similar primary diagnosis conditions as a "comparison population". Another drawback related to surveys is getting scores on an annual basis for comparison from the ARKids First A beneficiary survey. A comparison will be evaluated every two years due to the survey being conducted every two years to address this challenge.

Attachments

Appendix A. Driver Diagram

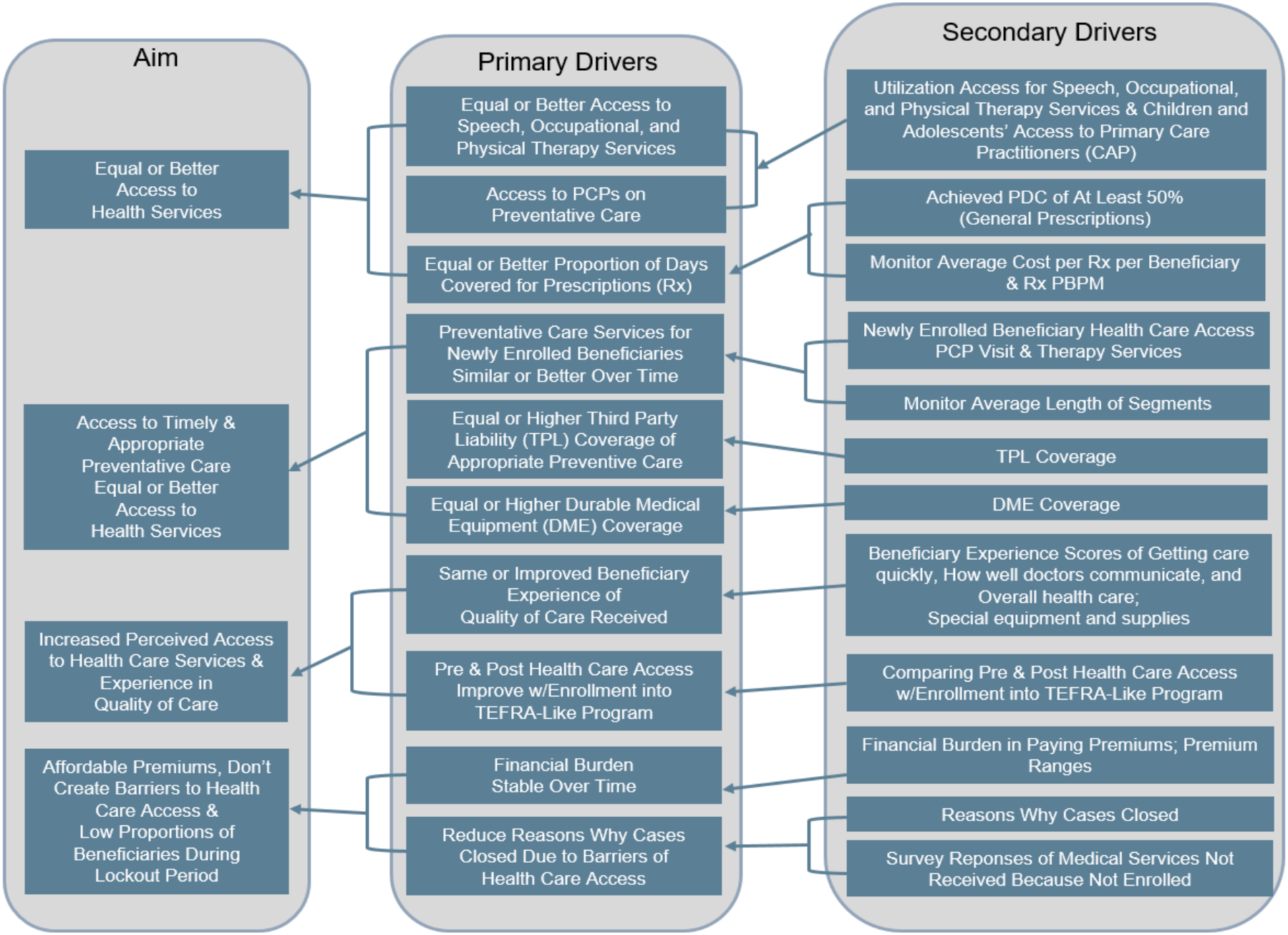
Appendix B. Four Goals with Evaluation Hypotheses and Drivers

Appendix C. Research Questions, Evaluation Design Outcome and Metrics, Comparison Populations, Data Sources, and Analytic Methods Summary Table

Appendix D. Independent Evaluator

Appendix E. Evaluation Budget

Appendix A. Driver Diagram



Appendix B. Four Goals with Evaluation Hypotheses and Drivers

#	Goal	Hypotheses	Drivers
1	Ensuring that demonstration enrollees have equal or better access to health services compared to the Medicaid fee-for-service population	Hypothesis 1.1: 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 Non-TEFRA-like). Hypothesis 1.2: The beneficiaries of the Arkansas TEFRA-like demonstration have equal or better proportion of days covered for prescriptions compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).	Utilizing claims-based & beneficiary's experience of therapy services. Examining PCP visits, Rx proportion of days covered, Rx costs and usage of seizure medications.
2	Ensuring demonstration enrollees have access to timely and appropriate preventive care	Hypothesis 2.1: Preventive care services for newly enrolled beneficiaries of the Arkansas TEFRA-like demonstration are similar or better over time. Hypothesis 2.2: The beneficiaries of the Arkansas TEFRA-like demonstration have equal or higher rates of third-party liability (TPL) coverage of appropriate preventive care compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like). Hypothesis 2.3: The beneficiaries of the Arkansas TEFRA-like demonstration have equal or higher rates of durable medical equipment (DME) coverage of appropriate preventive care compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).	Examining TEFRA-like coverage. Reviewing PCP visits and therapy services access on newly enrolled TEFRA-like beneficiaries. Utilizing beneficiary's experience of access to health care. Investigating TPL and DME coverage.
3	Ensuring enrollment in the demonstration increases beneficiaries' perceived access to health care services and experience in the quality of care received	Hypothesis 3.1: Patient experience for the quality of care and access to health care services received by the beneficiaries in the Arkansas TEFRA-like demonstration has remained the same or improved over time. Hypothesis 3.2: Patient's experience with access to health care services improve with enrollment into TEFRA-like program.	Utilizing beneficiary's experience of doctor communication and overall health care. Impacts on health care access pre and post.
4	Ensuring premium contributions are affordable, do not create a barrier to health care access, and that the proportion of beneficiaries who experience a lockout period for nonpayment of premiums is relatively low	Hypothesis 4.1: Premium barriers for TEFRA-like beneficiaries will remain stable over time. Hypothesis 4.2: Reduce the number of reasons why Arkansas TEFRA-like beneficiaries' cases were closed due to program barriers of health care access.	Examining percent of TEFRA-like lockouts and financial burden. Utilizing disenrollees experience of therapy services. Investing reasons why cases were closed.

Appendix C. Research Questions, Evaluation Design Outcome and Metrics, Comparison Populations, Data Sources, and Analytic Methods Summary Table

The nine research hypotheses are grouped according to the four demonstration goals as described in **Appendix B**. The descriptions presented below under each hypotheses specify outcomes and metrics, comparison methods, data sources for the research questions to assess the evaluation design.

For *Goal 1: Ensuring that demonstration enrollees have equal or better access to health services compared to the Medicaid fee-for-service population*, Metrics 1.1a – 1.1c and 1.2a – 1.2d will be used.

Hypothesis 1.1 will compare the access to therapy health care services for beneficiaries in the TEFRA- like demonstration to the beneficiaries in the Medicaid non-TEFRA-like population based on similar beneficiary characteristics. In order to evaluate access to health services across all age groups, comparisons will be made using a HEDIS metric, Children and Adolescents' Access to Primary Care Practitioners (CAP). This metric measures the percentage of beneficiaries who had a visit with a PCP during the measurement year. In exploratory research, results were calculated and reviewed over several national metrics under the Child Core Set and HEDIS metrics such as 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, Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication, Annual Dental Visit (ADV), and Medication Management for People with Asthma (MMA) but small denominator sizes were not always valid under the TEFRA-like population for comparison to Medicaid non-TEFRA-like population. Contractor will examine access to health services by analyzing survey questions from the TEFRA beneficiary satisfaction survey "In the last 6 months, how much of a problem, if any, was it to get the therapy services your child needed through TEFRA?" Results will be broken down by a) speech, b) occupational, and c) physical therapy services and also a composite score as needed. For comparison between the TEFRA-like and non-TEFRA-like populations, the percentage of beneficiaries who are utilizing each or combination of therapy services will be analyzed using administrative claims during similar performance periods. Hypothesis 1.2 will assess if the Arkansas TEFRA-like demonstration have equal or better proportion of days covered for prescriptions compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like). Specifically for Pharmacy Quality Alliance (PQA-like) and home-grown metric of proportion of days covered (PDC) on general prescriptions, the percentage of TEFRA beneficiaries with at least two prescriptions and who achieved a PDC of at least 50% was developed. Seizure medications were analyzed during initial research on the study group. Results showed almost 10% of TEFRA-like beneficiaries had at least two seizure medications filled during CY2016. In addition, the state will analyze the average cost per prescription (Rx) per beneficiary and prescriptions (Rx) per beneficiary per month (PBPM) for the

TEFRA-like population. Hypothesis 1.1 and 1.2 will use a t-test or other applicable bivariate testing to evaluate statistically significant differences between the TEFRA-like demonstration population and the Medicaid non-TEFRA- like population. The analysis will be tested using a significance level of $p < 0.05$.

Hypothesis 1.1: ***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 Non-TEFRA-like).***

Metric 1.1a	Claims-based therapy services
Description:	The percentage of beneficiaries < 19 years of age who are utilizing therapy services during the measurement period (By a) speech, b) occupational, and c) physical therapy services)
Technical Specifications:	Denominator: Eligible population. Denominator is the number of beneficiaries < 19 years of age that were continuously enrolled during the measurement period. Numerator(s): Numerator is number of beneficiaries < 19 years of age that were continuously enrolled utilizing therapy services during the measurement period (By a) speech, b) occupational, and c) physical therapy services). Therapy Service: Identify beneficiaries who received at least one therapy visit from value set codes as defined below for Occupational Therapy Value Set, Occupational/Physical Therapy Value Set, Physical Therapy Value Set, Speech Therapy Value Set, and Therapy Assistant Modifiers Value Set during the measurement period.
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during each period of continuous enrollment
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	1.1a & 1.1b
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total. By region: Central, Northeast, Northwest, Southeast, and Southwest. Beneficiaries not associated with above regions will be denoted as “Out-of-State.”
Metric Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

Metric 1.1b	Survey-based therapy services (i.e. special therapies)
Description:	Scores of the TEFRA beneficiary satisfaction survey questions of "In the last 6 months, how much of a problem, if any, was it to get the therapy services your child needed through TEFRA?" (By a) speech, b) occupational, and c) physical therapy services) (Domain: *Special therapies*)
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question. Numerator is number of respondents who answered "Not a problem," in the last 6 months to get therapy your child needed through TEFRA. (By a) speech, b) occupational, and c) physical therapy services). "In the last 6 months, how much of a problem, if any, was it to get the speech therapy your child needed through TEFRA?", "In the last 6 months, how much of a problem, if any, was it to get the occupational therapy your child needed through TEFRA?" and "In the last 6 months, how much of a problem, if any, was it to get the physical therapy your child needed through TEFRA?". (Domain: *Special therapies*).
Sampling Frame:	Beneficiaries who had a break of at least one month in previous year's premium payments were identified. This included all TEFRA-like beneficiaries with premium payment amounts ranging from $0 to $458. TEFRA beneficiaries who showed premium payments for all 12 months in previous year were excluded from the population. The sample was de-duplicated by household. Where more than one beneficiary was found in a household, the youngest beneficiary was utilized for survey purposes.
Research Question(s):	1.1b
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report)
Comparison Group:	Therapy claims-based service rates compare to TEFRA satisfaction survey scores of getting speech, occupational, and physical therapies, where applicable. Trend over time of TEFRA satisfaction survey scores.
Comparison Method(s):	Two-group t-test; Chi-squared test

Metric 1.1c	Children and Adolescents' Access to Primary Care Practitioners (CAP)
Description:	The percentage of beneficiaries 12 months–18 years of age who had a visit with a PCP. Report four age stratifications. • Children 12–24 months and 25 months–6 years who had a visit with a PCP during the measurement year. • Children 7–11 years and adolescents 12–18 years who had a visit with a PCP during the measurement year or the year prior to the measurement year.
Technical Specifications:	Denominator: The eligible population. Denominator is the number of beneficiaries for a) 12 months – 6 years of age that were continuously enrolled during the measurement period and b) 7 – 18 years of age that were continuously enrolled during the measurement period and year prior to the measurement period. Numerator(s): For 12–24 months, 25 months–6 years: One or more visits with a PCP (Ambulatory Visits

	Value Set) during the measurement period. For 7–11 years, 12–18 years: One or more visits with a PCP (Ambulatory Visits Value Set) during the measurement period or the year prior to the measurement period. Count all beneficiaries who had an ambulatory or preventive care visit to any PCP. Exclude specialist visits. In addition, similar check was applied as used for Core Set CAP metric implementation of header billing provider type in ('01' '02' '03' '04' '05' '24' '29' '49' '58' '62' '69' '81'). Numerator is the number of beneficiaries a) 12 months – 6 years of age who had one or more visits with a PCP during the measurement period and b) 7 – 18 years of age who had one or more visits with a PCP during the measurement period or the year prior to the measurement period.
Continuous Enrollment:	For 12–24 months, 25 months–6 years: No more than one gap in enrollment of up to 45 days during the measurement year. For 7–11 years, 12–18 years: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	1.1c
Metric Steward:	NCQA/Core Set of Health Care Quality Measures for Children in Medicaid and CHIP
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test
National Benchmark:	CMS Core Set Mean Rate Across Reported States by CMS[6]; NCQA's State of Health Report Card (Medicaid HMO)[7]

Hypothesis 1.2: ***The beneficiaries of the Arkansas TEFRA-like demonstration have equal or better proportion of days covered for prescriptions compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).***

Metric 1.2a	Proportion of days covered (PDC) threshold of 50%
Description:	The percentage of beneficiaries < 19 years of age who met the proportion of days covered (PDC) threshold of 50% during the measurement period (General Prescriptions)

[6] CMS annually releases information on state progress in reporting the Child Core Set measures and assesses state-specific performance for measures that are reported by at least 25 states and which met internal standards of data quality. https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html.

[7] NCQA's State of Health Care Quality Report. NCQA produces every year to focus on major quality issues the U.S. faces and to support the spread of evidence-based care. https://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality-report/.

Technical Specifications:	Denominator: The eligible population. Denominator is number of beneficiaries < 19 years of age who were dispensed at least two prescriptions on two unique dates of service during the measurement period. Numerator(s): Numerator is number of beneficiaries who met the 50% PDC threshold (from Index Prescription Start Date (IPSD) to the end of the measurement period) during the measurement period.
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during each period of continuous enrollment
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	1.2a & 1.2b
Sub-group:	By parts of the state with low and high access. By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total. By region: Central, Northeast, Northwest, Southeast, and Southwest. Beneficiaries not associated with above regions will be denoted as “Out-of-State”.
Metric Steward:	PQA-Like/DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

Metric 1.2b	**Average cost per prescription (Rx) per beneficiary**
Description:	The average cost per prescription (Rx) per beneficiary for < 19 years of age that were continuously enrolled during the measurement period
Technical Specifications:	Denominator: The eligible population. Denominator is the total number of prescriptions dispensed for beneficiaries < 19 years of age that were continuously enrolled during the measurement period. If multiple prescriptions are dispensed on the same day, calculate number of unique ICNs. Numerator(s): Calculate the total cost of prescriptions dispensed during the measurement period. Sum across claims on header paid amount for total cost of prescriptions. Numerator is the total prescription costs during the measurement period.
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during each period of continuous enrollment
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	1.2c
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total. By gender: Female, Male, and Unknown. By region: Central, Northeast, Northwest, Southeast, and Southwest. Beneficiaries not associated with above regions will be denoted as “Out-of-State”. Identify the top five prescriptions based upon average cost per prescription (Rx) per beneficiary (or number of beneficiaries). To review the top five prescriptions based upon number of beneficiaries who qualified for

	the denominator.
Metric Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

Metric 1.2c	**Prescriptions (Rx) per beneficiary per month (PBPM)**
Description:	The prescriptions (Rx) per beneficiary per month (PBPM) for < 19 years of age during the measurement period
Technical Specifications:	Denominator: The eligible population. Denominator is the number of beneficiary months. Beneficiary months are a beneficiary's contribution to the total 12-month enrollment. Beneficiary months are calculated by summing the total number of months each beneficiary is enrolled in the program during the measurement period. Numerator(s): Calculate the total number of prescriptions dispensed during the measurement period. Numerator is the number of general prescriptions filled for beneficiaries during the measurement period. If multiple prescriptions are dispensed on the same day, calculate number of unique ICNs.
Beneficiary Months:	Verify Medicaid enrollment on the last day of each month during the measurement period. Count the month if the beneficiary is enrolled and < 19 years of age.
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	1.2d
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total.
Metric Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

Metric 1.2d	**Anti-Seizure**
Description:	The percentage of beneficiaries < 19 years of age taking at least two seizure medications during the measurement period
Technical Specifications:	Denominator: The eligible population. Denominator is the number of beneficiaries < 19 years of age that were continuously enrolled during the measurement period.

	Numerator(s): Numerator is the number of beneficiaries who have at least two seizure prescriptions during the measurement period. Anti-seizure medications may be dispensed on the same day. 1. At least two medications from Anticonvulsants Medications Value Set (i.e. H4A or H4B). 2. Or one medication from Anticonvulsants Medications Value Set (i.e. H4A or H4B) and at least one medication from Benzodiazepines Medications Value Set (i.e.H8R).
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during each period of continuous enrollment
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	1.2e
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total.
Metric Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

For *Goal 2: Ensuring demonstration enrollees have access to timely and appropriate preventive care*, Metrics 2.1a – 2.1c, 2.2a – 2.2b, and 2.3a will be used.

Hypothesis 2.1 will identify the newly enrolled TEFRA-like beneficiaries and determine the rate of beneficiaries receiving first health care visit to PCP within 60 days of enrollment. Similar analysis on newly enrolled TEFRA-like beneficiaries will calculate the rate of beneficiaries receiving first health care visit to speech, occupational, or physical therapy services within 60 days of enrollment during the measurement period. Exploratory analysis for CY2016 showed that TEFRA-like beneficiaries are enrolled for the vast part of the year (i.e. average length of over 11 months out of a calendar year). Under this hypothesis a trend will evaluate of this a continued pattern or fluctuates year by year.

Under hypothesis 2.2, the percentage of TEFRA-like beneficiaries who have third-party liability (TPL) coverage will be calculated to compare if rates are equal to or higher than the Medicaid Non-TEFRA-like group. The state will determine which geographic regions have low percentages and high percentages of TPL coverage for both target and comparison populations. Lastly, the contractor will investigate if there is a difference between rates of beneficiaries who had at least one Medicaid claim paid by TPL coverage and who had a visit with a PCP during measurement period.

Similar to 2.2, hypothesis 2.3 will study TEFRA-like beneficiaries who have durable medical equipment (DME) services. TEFRA-like beneficiary's primary care physician involvement is important in determining if DME services are medically necessary and prescribed on a

regular basis. Another indication to analyze DME services was found in exploratory analysis of TEFRA-like beneficiaries primary diagnosis groupings. Based on exploratory analysis during CY2016 of selected primary diagnosis group for medical conditions, *Other Congenital Anomalies* was affecting slightly over 14% for the TEFRA-like population. Hypothesis 2.2 - 2.3 will use a t-test or other applicable bivariate testing to evaluate statistically significant differences between the TEFRA-like demonstration population and the Medicaid non-TEFRA- like population. The analysis will be tested using a significance level of $p < 0.05$.

Hypothesis 2.1: ***Preventive care services for newly enrolled beneficiaries of the Arkansas TEFRA-like demonstration are similar or better over time.***

Metric 2.1a	First health care visit to PCP w/in 60 days
Description:	The percentage of newly enrolled TEFRA-like beneficiaries < 19 years of age for which the TEFRA-like beneficiary received first health care visit to PCP within 60 days of enrollment during the measurement period
Technical Specifications:	Denominator: The eligible population. Denominator is the number of newly enrolled TEFRA-like beneficiaries < 19 years of having an enrollment start date of at least 60 days before the end of the measurement period. Numerator(s): Numerator is the number of newly enrolled TEFRA-like beneficiaries for which the TEFRA-like beneficiary received first health care visit to PCP within 60 days of enrollment during the measurement period.
Newly Enrolled:	Identify newly enrolled TEFRA-like beneficiaries where an enrollment start date is at least 60 days before the end of the measurement period
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	2.1a
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total.
Metric Steward:	DMS Homegrown; CAP Portion: NCQA/Core Set of Health Care Quality Measures for Children in Medicaid and CHIP
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Trend over time of TEFRA-like coverage
Comparison Method(s):	Longitudinal data analysis

Metric 2.1b	First health care visit for therapy services w/in 60 days
Description:	The percentage of newly enrolled TEFRA-like beneficiaries < 19 years of age for which the TEFRA-like beneficiary received first health care visit for speech, occupational, or physical therapy services within 60 days of enrollment during the measurement period
Technical Specifications:	Denominator: The eligible population. Denominator is the number of newly enrolled TEFRA-like beneficiaries < 19 years of having an enrollment start date of at least 60 days before the end of the measurement period. Numerator(s): Numerator is the number of newly enrolled TEFRA-like beneficiaries for which the TEFRA-like beneficiary received first health care visit to speech, occupational, or physical therapy services within 60 days of enrollment during the measurement period. Therapy Service: Identify beneficiaries who received at least one therapy visit from value set codes as defined below for Occupational Therapy Value Set, Occupational/Physical Therapy Value Set, Physical Therapy Value Set, Speech Therapy Value Set, and Therapy Assistant Modifiers Value Set during the measurement period.
Newly Enrolled:	Identify newly enrolled TEFRA-like beneficiaries where an enrollment start date is at least 60 days before the end of the measurement period
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	2.1b
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total. By region: Central, Northeast, Northwest, Southeast, and Southwest. Beneficiaries not associated with above regions will be denoted as “Out-of-State”.
Metric Steward:	DMS Homegrown; CAP Portion: NCQA/Core Set of Health Care Quality Measures for Children in Medicaid and CHIP
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

Metric 2.1c	Average length of TEFRA-like segments
Description:	The average length (in months) of TEFRA-like segments for beneficiaries <19 years of age during the measurement period.
Technical Specifications:	Denominator: The eligible population. Denominator is the number of TEFRA-like beneficiaries < 19 years of age enrolled during the measurement period.

	Numerator(s): Calculate the total number of days each TEFRA-like beneficiary is enrolled during the measurement period. Sum across all TEFRA-like beneficiaries for overall total number of days. Numerator is the total number of days across all enrolled TEFRA-like beneficiaries during the measurement period. Average Length in Months: Calculate the average length in months as ((total number of days each TEFRA-like beneficiary is enrolled during the measurement period divided by number of TEFRA-like beneficiaries < 19 years of age enrolled during the measurement period) then divided by 30 calendar days. Outcome is total number of months each TEFRA-like beneficiary is enrolled during the measurement period.
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	2.1c
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total.
Metric Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Trend over time of TEFRA-like coverage
Comparison Method(s):	Longitudinal data analysis

Hypothesis 2.2 ***The beneficiaries of the Arkansas TEFRA-like demonstration have equal or higher rates of third-party liability (TPL) coverage of appropriate preventive care compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).***

Metric 2.2a	Third Party Liability (TPL) coverage
Description:	The percentage of beneficiaries <19 years of age who had at least one Medicaid claim paid by Third Party Liability (TPL) coverage (non-Medicaid) that were continuously enrolled during the measurement period. TPL coverage represents where a beneficiary had a TPL claim within the measurement period.
Technical Specifications:	Denominator: The eligible population. Denominator is the number of beneficiaries < 19 years of age that were continuously enrolled during the measurement period. Numerator(s): Count all beneficiaries where private insurance amount (header) is > $0 or had a crossover claim (Medicare coverage) during the measurement period. Numerator is the number of beneficiaries who had at least one TPL claim during the measurement period.
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during each period of continuous enrollment
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	2.2a & 2.2c
Sub-group:	By region: Central, Northeast, Northwest, Southeast, and Southwest. Beneficiaries not associated with above regions will be denoted as “Out-of-State”.
Metric Steward:	DMS Homegrown

Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

Metric 2.2b	**Third Party Liability (TPL) coverage & CAP**
Description:	The percentage of beneficiaries 12 months–18 years of age who had at least one Medicaid claim paid by Third Party Liability (TPL) coverage (non-Medicaid) and who had a visit with a PCP. Report four age stratifications. • Children 12–24 months and 25 months–6 years who had at least one Medicaid claim paid by Third Party Liability (TPL) coverage (non-Medicaid) and who had a visit with a PCP during the measurement year. • Children 7–11 years and adolescents 12–18 years who had at least one Medicaid claim paid by Third Party Liability (TPL) coverage (non-Medicaid) and who had a visit with a PCP during the measurement year or the year prior to the measurement year.
Technical Specifications:	Denominator: The eligible population. Denominator is the number of beneficiaries who had at least one Medicaid claim paid by Third Party Liability (TPL) coverage (non-Medicaid) for a) 12 months – 6 years of age that were continuously enrolled during the measurement period and b) 7 – 18 years of age that were continuously enrolled during the measurement period and year prior to the measurement period. Numerator(s): For 12–24 months, 25 months–6 years: One or more visits with a PCP (Ambulatory Visits Value Set) during the measurement period. For 7–11 years, 12–18 years: One or more visits with a PCP (Ambulatory Visits Value Set) during the measurement period or the year prior to the measurement period. Count all beneficiaries who had an ambulatory or preventive care visit to any PCP. Exclude specialist visits. In addition, similar check was applied as used for Core Set CAP metric implementation of header billing provider type in ('01' '02' '03' '04' '05' '24' '29' '49' '58' '62' '69' '81'). Numerator is the number of beneficiaries who had a visit with a PCP a) 12 months – 6 years of age who had one or more visits with a PCP during the measurement period and b) 7 – 18 years of age who had one or more visits with a PCP during the measurement period or the year prior to the measurement period.
Continuous Enrollment:	For 12–24 months, 25 months–6 years: No more than one gap in enrollment of up to 45 days during the measurement year. For 7–11 years, 12–18 years: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	2.2b
Metric Steward:	DMS Homegrown; NCQA/Core Set of Health Care Quality Measures for Children in Medicaid and CHIP
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)

Comparison Method(s):	Two-group t-test

Hypothesis 2.3 ***The beneficiaries of the Arkansas TEFRA-like demonstration have equal or higher rates of durable medical equipment (DME) coverage of appropriate preventive care compared to the Medicaid fee-for-service population (Medicaid Non-TEFRA-like).***

Metric 2.3a	Durable Medically Equipment (DME) coverage
Description:	The percentage of beneficiaries <19 years of age who had at least one DME coverage claim that were continuously enrolled during the measurement period
Technical Specifications:	Denominator: The eligible population. Denominator is the number of beneficiaries < 19 years of age that were continuously enrolled during the measurement period. Numerator(s): Numerator is the number of beneficiaries who had at least one DME coverage claim during the measurement period.
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during each period of continuous enrollment
Exclusion Criteria:	Beneficiaries in hospice are excluded from the eligible population
Research Question(s):	2.3a & 2.3b
Sub-group:	By age group: 0-4 years, 5-8 years, 9-12 years, 13-18 years, and Total. Identify top primary dx conditions and conditions types on number of claims and beneficiaries <19 years of age who have DME coverage for beneficiaries who qualified for the numerator during the measurement period. To review the top 10 primary diagnosis conditions and condition types (i.e. groupings) by number of claims for beneficiaries who qualified for the numerator. In addition, to review number of beneficiaries for each top 10 primary diagnosis condition. Number of claims and beneficiaries for the top 10 primary diagnosis conditions (based on the total number of distinct claims from the beneficiaries who have DME coverage).
Metric Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2019 (January 1, 2018 – December 31, 2019) for interim evaluation report; 2018 – 2022 (January 1, 2018 – December 31, 2022) for summative evaluation report
Comparison Group:	Medicaid Non-TEFRA-like beneficiary comparison group (Ages <19 and selected primary dx conditions)
Comparison Method(s):	Two-group t-test

For *Goal 3: Ensuring enrollment in the demonstration increases beneficiaries' perceived access to health care services and experience in the quality of care received*, Metrics 3.1a – 3.1c and 3.2a – 3.2c will be used.

TEFRA Beneficiary Satisfaction Survey questions related to access to health care services and quality of care received will be organized into three domains and records beneficiary's experience for each domain. A composite score will be used from each of the three domains.

A composite score domain combines the responses of two or more questions, except for "Overall health care" domain, to obtain a single score. The composite domains represent the percentage of beneficiaries who responded favorably. For example, questions scaled as "Never," "Sometimes," "Usually" and "Always," a favorable response represents the proportion of beneficiaries who selected "Usually" or "Always."

- ***Domain 1 - Getting care quickly:***
  - *Obtaining care right away for an illness/injury/condition*
  - *Obtaining care when wanted, but not needed right away*
- ***Domain 2 - How well doctors communicate:***
  - *Doctors explaining things in an understandable way to your child*
  - *Doctors listening carefully to you*
  - *Doctors showing respect for what you had to say*
  - *Doctors spending enough time with the child*
- ***Domain 3 - Overall health care:***
  - *Rating of health care*

Sequential trend analyses will be used to assess whether beneficiary experience has improved over time or remained the same. The scores, if available, will be compared to both ARKids First A and First B beneficiary survey data. TEFRA Beneficiary Satisfaction Survey asked patients to compare certain aspects of the health care plan their child had in the six months before enrolling in TEFRA (pre-TEFRA) with post enrollment in the TEFRA health plan (post-TEFRA). The three survey questions will be evaluated to determine the impact of patient experience on access to health care services after receipt of enrollment into TEFRA-like program (i.e. questions of "How much of a problem, if any, was it for your child to see a personal doctor or nurse?", "How much of a problem, if any, was it to get your child's prescription medication?", and "How much of a problem, if any, was it for your child to get urgent care?"). A chi-square goodness of fit test will be used to test whether the observed proportions for a categorical variable differ from assumed proportions. The analysis will be tested using a significance level of $p < 0.05$.

Hypothesis 3.1 ***Patient experience for the quality of care and access to health care services received by the beneficiaries in the Arkansas TEFRA-like demonstration has remained the same or improved over time.***

Metric 3.1a	Survey-based getting care quickly
Description:	The percentage of survey responses marked "Usually" or "Always" (i.e. favorably) for domain of Getting care quickly (i.e. receiving care right away for an illness, injury, or condition AND able to get an appointment at a doctor's office or clinic as soon as needed). (Domain: *Getting care quickly*).
Technical Specifications:	Denominator: Eligible population. Denominator is the number of survey questions (n = 2) used for composite score. Number of respondents who answered the survey question (for each survey question). Numerator(s): Numerator is combination of scores (percentage). Number of respondents who answered "Usually" or "Always" receiving care right away for an illness, injury, or condition AND able to get an appointment at a doctor's office or clinic as soon as needed (for each survey question). Questions on Obtaining care right away for an illness/injury/condition ("In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?") and Obtaining care when wanted, but not needed right away ("In the last 6 months, not counting the times your child needed care right away, how often did you get an appointment for health care at a doctor's office or clinic as soon as your child needed?") (Domain: *Getting care quickly*).
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	3.1a
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	TEFRA Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey: 2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report); Child (ARKids First A) Beneficiary Satisfaction Survey: 2017 & 2019 (interim evaluation report); 2017, 2019, & 2021 (summative evaluation report)
Comparison Group:	Child (ARKids First A) Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey. Questions on Obtaining care right away for an illness/injury/condition ("In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?") and Obtaining care when wanted, when not needed right away ("In the last 6 months, when you made an appointment for a check-up or routine care for your child at a doctor's office or clinic, how often did you get an appointment as soon as your child needed?").

	Trend over time of satisfaction survey scores.
Comparison Method(s):	Two-group t-test; Chi-squared test
National Benchmark:	National CAHPS Benchmarking Database (NCBD)

Metric 3.1b	**Survey-based how well doctors communicate**
Description:	The percentage of survey responses marked "Usually" or "Always" (i.e. favorably) for domain of How well doctors communicate (i.e. Doctors explaining things in an understandable way, Doctors listening carefully to you, Doctors showing respect for what you had to say, AND Doctors spending enough time with you. (Domain: *How well doctors communicate*).
Technical Specifications:	Denominator: Eligible population. Denominator is the number of survey questions (n = 4) used for composite score. Number of respondents who answered the survey question (for each survey question). Numerator(s): Numerator is combination of scores (percentage). Number of respondents who answered "Usually" or "Always" on Doctors explaining things in an understandable way to your child AND Doctors listening carefully to you AND Doctors showing respect for what you had to say AND Doctors spending enough time with your child (for each survey question). Questions on Doctors explaining things in an understandable way to your child ("In the last 6 months, how often did doctors or other health providers explain things in a way your child could understand?"), Doctors listening carefully to you ("In the last 6 months, how often did your child's doctors or other health providers listen carefully to you?"), and Doctors showing respect for what you had to say ("In the last 6 months, how often did your child's health care professional show respect for what you had to say?"), and Doctors spending enough time with your child ("In the last 6 months, how often did doctors or other health providers spend enough time with your child?"). (Domain: *How well doctors communicate*).
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	3.1b
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	TEFRA Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey: 2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report); Child (ARKids First A) Beneficiary Satisfaction Survey: 2017 & 2019 (interim evaluation report); 2017, 2019, & 2021 (summative evaluation report)
Comparison Group:	Child (ARKids First A) Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey.

	Questions on Doctors listening carefully to you ("In the last 6 months, how often did your child's personal doctor listen carefully to you?"), Doctors showing respect for what you had to say ("In the last 6 months, how often did your child's personal doctor show respect for what you had to say?"), Doctors explaining things in an understandable way to your child ("In the last 6 months, how often did your child's personal doctor explain things in a way that was easy for your child to understand?"), and Doctors spending enough time with your child ("In the last 6 months, how often did your child's personal doctor spend enough time with your child?"). Trend over time of satisfaction survey scores.
Comparison Method(s):	Two-group t-test; Chi-squared test
National Benchmark:	National CAHPS Benchmarking Database (NCBD)

Metric 3.1c	**Survey-based overall health care**
Description:	The percentage of survey responses marked ratings of 8, 9, or 10 (i.e. favorably) for Overall health care. (Domain: *Overall health care*).
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question. Numerator(s): Numerator is number of survey responses of 8, 9 or 10. Question on rating of health care, ("We want to know your rating of all your child's health care in the last 6 months from all doctors and other health providers. How would you rate all your child's health care?"). (Domain: *Overall health care*).
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	3.1c
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	TEFRA Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey: 2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report); Child (ARKids First A) Beneficiary Satisfaction Survey: 2017 & 2019 (interim evaluation report); 2017, 2019, & 2021 (summative evaluation report);
Comparison Group:	Child (ARKids First A) Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey. Question on rating of health care, where numerator represents responses of 8, 9 or 10, ("Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number

	would you use to rate all your child's health care in the last 6 months?"). Trend over time of satisfaction survey scores.
Comparison Method(s):	Two-group t-test; Chi-squared test
National Benchmark:	National CAHPS Benchmarking Database (NCBD)

Hypothesis 3.2 ***Patient's experience with access to health care services improve with enrollment into TEFRA-like program.***

Metric 3.2a	**Survey-based of Pre-TEFRA vs. Post-TEFRA: Personal doctor or nurse**
Description:	The percentage of survey responses marked "Big or small problem" on "How much of a problem, if any, was it for your child to see a personal doctor or nurse?".
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question. Numerator(s): Numerator is number of survey responses of "Big or small problem". Question on "How much of a problem, if any, was it for your child to see a personal doctor or nurse?".
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	3.2a
Sub-group:	Pre-TEFRA vs. Post-TEFRA
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	Two-group t-test; Chi-squared test

Metric 3.2b	**Survey-based of Pre-TEFRA vs. Post-TEFRA: Prescription**
Description:	The percentage of survey responses marked "Big or small problem" on "How much of a problem, if any, was it to get your child's prescription medication?".
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question.

	Numerator(s): Numerator is number of survey responses of "Big or small problem". Question on “How much of a problem, if any, was it to get your child’s prescription medication?”.
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	3.2b
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores.
Comparison Method(s):	Two-group t-test; Chi-squared test

Metric 3.2c	**Survey-based of Pre-TEFRA vs. Post-TEFRA: Urgent care**
Description:	The percentage of survey responses marked "Big or small problem" on “How much of a problem, if any, was it for your child to get urgent care?”.
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question. Numerator(s): Numerator is number of survey responses of "Big or small problem". Question on “How much of a problem, if any, was it for your child to get urgent care?”.
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	3.2c
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	Two-group t-test; Chi-squared test

For *Goal 4: Ensuring premium contributions are affordable, do not create a barrier to health care access, and that the proportion of beneficiaries who experience a lockout period for nonpayment of premiums is relatively low*, Metrics 4.1a – 4.1b and 4.2a – 4.2d will be used.

Families of children determined eligible for the TEFRA-like program whose annual income after allowable deduction exceeds 150 percent of the federal poverty level are required to pay a monthly premium to participate in the program. Monthly premiums are based on a family's household size, the number of people living in the household, and the annual income as reported to the Internal Revenue Service. Families can deduct $600 for each dependent child living in the home, along with excess medical and dental expenses as shown on Schedule A of the parents' federal tax returns[8]. The beneficiary's experience on TEFRA-like premiums in view of financial burdensome will be evaluated to determine affordability of premiums. Along with testing the stability if the caretaker's experience on TEFRA-like premiums are a financial burden, the premium range (i.e. $20–$41 vs. $208–$250) can provide information on how much these ranges differ. The contractor will review the top five reasons why TEFRA-like beneficiary cases were closed. This will aid in understanding reasons why disenrollment and if child is receiving health care during a closed case. The state will also investigate barriers of therapy services during the patient's lockout period. The three survey questions related to getting special therapies for a) speech, b) occupational, and c) physical therapy will be utilized between TEFRA Disenrollee Beneficiary Survey data and TEFRA Beneficiary Survey data, where applicable for measurement periods. Lastly, the state will compare the common medical services a patient could not get will not enrolled in TEFRA-like program (i.e. regular physician visits, visits to a specialist, emergency room visits, dental visits, prescription medicine, special therapy, and medical equipment) and determine if any overlap exists with the top common diagnosis conditions for the TEFRA-like beneficiaries.

Hypothesis 4.1: ***Premium barriers for TEFRA-like beneficiaries will remain stable over time.***

Metric 4.1a	Survey-based premium barriers
Description:	The percentage of survey responses marked "A big financial burden" on "In the last 6 months, how much of a financial burden, if any, was it to pay the TEFRA program premiums?".
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question. Numerator(s): Numerator is number of survey responses of "A big financial burden". Question on "In the last 6 months, how much of a financial burden, if any, was it to pay the TEFRA program premiums?".
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one

[8] https://humanservices.arkansas.gov/about-dhs/dms/tefra/cost.

	gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	4.1a
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	Two-group t-test; Chi-squared test

Metric 4.1b	**Survey-based premium ranges for premium barriers**
Description:	A cross-table of the survey responses marked "A big financial burden" on “In the last 6 months, how much of a financial burden, if any, was it to pay the TEFRA program premiums?” by the premium ranges survey responses marked on “A premium is the amount of money you must pay monthly to receive services covered under the TEFRA program. What is your monthly TEFRA premium?”
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question of "A big financial burden" on “In the last 6 months, how much of a financial burden, if any, was it to pay the TEFRA program premiums?” Numerator(s): Numerator is the number of survey responses for each premium range. Questions on “In the last 6 months, how much of a financial burden, if any, was it to pay the TEFRA program premiums?” and “A premium is the amount of money you must pay monthly to receive services covered under the TEFRA program. What is your monthly TEFRA premium?”
Sampling Frame:	NCQA guidelines require each beneficiary to be enrolled for a minimum of six months with no more than one gap in enrollment of up to 45 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, Arkansas Foundation for Medical Care (AFMC) sets this criterion at 30 days because the enrollment data is reported monthly. Beneficiaries selected for other surveys within the last 12 months were excluded from the population, and only one beneficiary per household was selected.
Research Question(s):	4.1b
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2019 (interim evaluation report); 2018 – 2022 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	Two-group t-test; Chi-squared test

<u>Hypothesis 4.2:</u> Reduce the number of reasons why Arkansas TEFRA-like beneficiaries' cases were closed due to program barriers of health care access.

Metric 4.2a	Survey-based reasons why cases closed
Description:	Identify the top five reasons why TEFRA-like beneficiary cases were closed from beneficiary satisfaction survey.
Technical Specifications:	Question on "What was the reason that your child's TEFRA case was closed? (Check all that apply)?".
Sampling Frame:	Beneficiaries who had a break of at least one month in previous year's premium payments were identified. This included all TEFRA-like beneficiaries with premium payment amounts ranging from $0 to $458. TEFRA beneficiaries who showed premium payments for all 12 months in previous year were excluded from the population. The sample was de-duplicated by household. Where more than one beneficiary was found in a household, the youngest beneficiary was utilized for survey purposes.
Research Question(s):	4.2a
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Disenrollee Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2019 (interim evaluation report) or as results are reported; 2018 – 2022 (summative evaluation report) or as results are reported.
Comparison Group:	Trend over time of top five reasons why TEFRA-like beneficiary cases were closed

Metric 4.2b	Survey-based getting care quickly for disenrollees
Description:	The percentage of survey (Disenrollee) responses marked "Usually" or "Always" (i.e. favorably) for domain of Getting care quickly (i.e. receiving care right away for an illness, injury, or condition AND able to get an appointment at a doctor's office or clinic as soon as needed). (Domain: *Getting care quickly*)
Technical Specifications:	Denominator: Eligible population. Denominator is the number of survey questions (n = 2) used for composite score. Number of respondents who answered the survey question (for each survey question). Numerator(s): Numerator is combination of scores (percentage). Number of respondents who answered "Usually" or "Always" receiving care right away for an illness, injury, or condition AND able to get an appointment at a doctor's office or clinic as soon as needed (for each survey question). Questions on Obtaining care right away for an illness/injury/condition ("During the period your child's TEFRA was closed, when your child needed care right away, how often did your child get care as soon as he or she needed?"). and Obtaining care when wanted, but not needed right away ("During the time your child's TEFRA case was closed, not counting the times your child needed care right away, how often did you get an appointment for health care at a doctor's office or clinic as soon as soon as your child needed?"). (Domain: *Getting care quickly*)
Sampling Frame:	Beneficiaries who had a break of at least one month in previous year's premium payments were identified.

	This included all TEFRA-like beneficiaries with premium payment amounts ranging from $0 to $458. TEFRA beneficiaries who showed premium payments for all 12 months in previous year were excluded from the population. The sample was de-duplicated by household. Where more than one beneficiary was found in a household, the youngest beneficiary was utilized for survey purposes.
Research Question(s):	4.2b
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Disenrollee Beneficiary Survey
Measurement Period:	2018 – 2019 (interim evaluation report) or as results are reported; 2018 – 2022 (summative evaluation report) or as results are reported.
Comparison Group:	TEFRA Beneficiary Survey, Child (ARKids First A) Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey, where applicable. Trend over time of satisfaction survey scores.
Comparison Method(s):	Two-group t-test; Chi-squared test
National Benchmark:	National CAHPS Benchmarking Database (NCBD)

Metric 4.2c	**Survey-based therapy services (i.e. special therapies) for disenrollees**
Description:	Percentage of survey responses marked “Not a problem” by a) speech, b) occupational, and c) physical therapy services
Technical Specifications:	Denominator: Eligible population. Denominator is the number of respondents who answered the survey question (for each survey question). If reviewing composite score, denominator is the number of survey questions (n = 3). Numerator(s): Number of respondents who answered "Not a problem", to get therapy your child needed. (By a) speech, b) occupational, and c) physical therapy services) (for each survey question). Combined scores (percentage) of not a problem of Getting Special therapies for a) speech, b) occupational, and c) physical therapy services divided by number of survey questions (n = 3). Questions on not a problem of Getting speech therapy (“During the time your child's TEFRA case was closed, how much of a problem, if any, was it to get the speech therapy your child needed?”), Not a problem of Getting occupational therapy (“During the time your child's TEFRA case was closed, how much of a problem, if any, was it to get the occupational therapy your child needed?”), and Not a problem of Getting physical therapy (“During the time your child's TEFRA case was closed, how much of a problem, if any, was it to get the physical therapy your child needed?”).
Sampling Frame:	Beneficiaries who had a break of at least one month in previous year’s premium payments were identified. This included all TEFRA-like beneficiaries with premium payment amounts ranging from $0 to $458. TEFRA beneficiaries who showed premium payments for all 12 months in previous year were excluded from the population. The sample was de-duplicated by household. Where more than one beneficiary was found in a household, the youngest beneficiary was utilized for survey purposes.

Research Question(s):	4.2c
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Disenrollee Beneficiary Survey
Measurement Period:	2018 – 2019 (interim evaluation report) or as results are reported; 2018 – 2022 (summative evaluation report) or as results are reported.
Comparison Group:	TEFRA Beneficiary Survey, where applicable. Trend over time of satisfaction survey scores.
Comparison Method(s):	Two-group t-test; Chi-squared test

Metric 4.2d	**Survey-based medical services not received for disenrollees**
Description:	Responses to survey question: What types of medical services could you not get for your child because your child was not enrolled in the TEFRA program?
Technical Specifications:	List the top medical services of beneficiaries not enrolled in TEFRA-like program. Question on "What types of medical services could you not get for your child because your child was not enrolled in the TEFRA program? (Check all that apply)?".
Sampling Frame:	Beneficiaries who had a break of at least one month in previous year's premium payments were identified. This included all TEFRA-like beneficiaries with premium payment amounts ranging from $0 to $458. TEFRA beneficiaries who showed premium payments for all 12 months in previous year were excluded from the population. The sample was de-duplicated by household. Where more than one beneficiary was found in a household, the youngest beneficiary was utilized for survey purposes.
Research Question(s):	4.2d
Metric Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H Medicaid Child survey; TEFRA Disenrollee Beneficiary Survey
Measurement Period:	2018 – 2019 (interim evaluation report) or as results are reported; 2018 – 2022 (summative evaluation report) or as results are reported.
Comparison Group:	Trend over time of top medical services of beneficiaries not enrolled in TEFRA-like program. Review the types of medical services related to the top common diagnosis conditions/codes for TEFRA-like beneficiaries.

Appendix D. Independent Evaluator

Based on State protocols, DMS did follow established policies and procedures to acquire an independent entity or entities to conduct the TEFRA-like demonstration evaluation. The State did either undertake a competitive procurement for the evaluator or did contract with entities that had an existing contractual relationship with the State. An assessment of potential contractors' experience, knowledge of State programs and populations, and resource requirements was determined during selection of the final candidate, including steps to identify and/or mitigate any conflicts of interest.

The contractor evaluator hired to conduct the analysis and write the valuation report is ensured to have no actual or potential conflicts of interests. The state hires a contractor independent from DHS and Arkansas Medicaid. The evaluation design includes a "No Conflict of Interest" signed confirmation statement from the independent evaluator. The federal approval of the TEFRA-like demonstration is prepared upon compliance with a set of Special Terms and Conditions. Specific to the program evaluation, the Special Terms and Conditions outline four goals that the State must investigate. DMS and the evaluator develop multiple hypotheses and research questions around these terms and conditions. The evaluation design includes a discussion of the goals, objectives, hypotheses, and research questions, including those that focus specifically on target and comparison populations, and more generally on beneficiaries and beneficiary's experience of services. The evaluator will continue to maintain separation throughout the demonstration evaluation to avoid potential conflicts of interest.

Appendix E. Evaluation Budget

An estimated total cost for the development and production of the TEFRA-like evaluation design and the resulting TEFRA-like evaluation reports are included in **Table 3.** This includes a breakdown of the estimated cost for staff and administration work, an approximation of cost and overall price to complete the five-year TEFRA-like evaluation. Cost includes data cleaning, analyses and the actual production of the evaluation design and evaluation report deliverables.

Table 3. Total TEFRA-Like Analysis Estimated Costs for Five Year Evaluation

Staff/ Work performed	Costs
Evaluation design/protocol	$9,977.73
Data preparation/cleaning	$21,635.37
Data analysis	$74,686.68
Report production	$12,046.21
Project Planning/Management	$5,647.29
Administration	$58,732.92
Estimated total cost	**$182,726.19**