DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-25-26
Baltimore, Maryland 21244-1850

State Demonstrations Group

March 15, 2024

Janet Mann
Deputy Director for Programs and State Medicaid Director
Department of Human Services
P.O. Box 1437, Slot S201
Little Rock, AR 72203-1437

Dear Director Mann:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Interim Evaluation Report, which is required by the Special Terms and Conditions (STCs), specifically STC #51 "Interim Evaluation Report" of the Arkansas Tax Equity and Fiscal Responsibility Act (TEFRA)-like section 1115 demonstration (Project Number 11-W-00163/6), effective through December 31, 2024. This Interim Evaluation Report covers the period from January 2018 through December 2021. CMS determined that the Evaluation Report, submitted on December 31, 2021 and revised on May 31, 2023, is in alignment with the CMS-approved Evaluation Design and the requirements set forth in the STCs, and therefore, approves the state's Interim Evaluation Report.

The Arkansas TEFRA-like demonstration is a cost sharing Medicaid program that enables certain children with a disability to receive care in their homes rather than in an institution implemented through a sliding scale premium fee structure based on family income. The demonstration population includes all beneficiaries covered under Title XIX of the Social Security Act in Arkansas that are ages 18 or younger, meet the medical necessity requirement for institutional care, have income that is less than the Medicaid long-term care limit, and do not have countable assets greater than $2,000. While it is a long-standing demonstration, descriptive trends and significance tests show that beneficiaries in the demonstration maintained access to care with some measures improving over the evaluation period, both compared to prior years as well as the comparison population (similar age and medical diagnosis as the target population, but qualifies for the Arkansas Medicaid program based on the Federal Poverty Level (FPL) thresholds). Survey responses indicate that beneficiary experiences with care remained consistently positive, with 90 percent or more of the beneficiaries responding that they usually or always received care quickly, had doctors that communicated well with them, and had favorable perceptions of their overall healthcare. Though claims-based service utilization measures for therapy services (such as occupational, speech, and physical) decreased during 2020 and 2021, likely due to the impact of the COVID-19 pandemic, utilization of these services was still significantly higher for the demonstration population than for the comparison population.

In accordance with STC #55, the approved Interim Evaluation Report may now be posted to the state's Medicaid website within 30 days. CMS will also post the Interim Evaluation Report on Medicaid.gov.

We look forward to our continued partnership on the Arkansas Tax Equity and Fiscal Responsibility Act (TEFRA)-like section 1115 demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

Danielle Daly -S

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Date: 2024.03.15 05:03:44 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Lee Herko, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

ARKANSAS TEFRA-LIKE
Section 1115
Project Number 11W001636

Draft Interim Evaluation Report

May 31, 2023

ARKANSAS DEPARTMENT OF HUMAN SERVICES

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I. Executive Summary

In this interim evaluation, the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 is examined based on four Centers for Medicare & Medicaid Services (CMS) approved evaluation goals. These goals include improving access to care, access to preventative care, beneficiaries' perception and satisfaction with their care, and affordability of TEFRA premiums. An evaluation design was developed by an Independent Evaluator (IE) to better understand the relationship between the aims, hypotheses, and outcome measures used to analyze performance. The IE provides a high-level overview of key interim findings, interpretations, policy implications, and any recommendations for this demonstration.

The TEFRA-like population includes all beneficiaries covered under Title XIX of the Social Security Act in the State of Arkansas that are ages 18 or younger, meet the medical necessity requirement, or are at risk of institutional care, have income that is less than the long-term care Medicaid limit, and do not have countable assets greater than $2,000. A non-TEFRA like population, which includes similar age and primary clinical condition characteristics as the TEFRA-like population, is used as a comparative group for selected claims-based measures.

While comparing the TEFRA-like population to the non-TEFRA-like population, the IE found the TEFRA-like population outperformed or was not significantly different than the non-TEFRA-like population on seven out of nine total claims-based measures from 2018 through 2021. Of the three claims-based measures where an analysis for the performance period (2018 – 2021) was completed on the TEFRA-like population only, the analysis showed a decrease overall in utilization for Primary Care Physician (PCP) visits and therapy services in the first 60 days for newly enrolled TEFRA beneficiaries. However, the average length of months enrolled in the TEFRA-like program displayed a significant improvement from baseline through interim years.

The TEFRA beneficiaries' perception, based off survey results, showed overall satisfaction with their health care services and coverage. A comparison was performed on three survey measures (Getting care quickly, How well doctors communicate, and Overall health care) between the TEFRA Beneficiary Satisfaction Survey and the ARKids First A and ARKids First B Beneficiary Satisfaction Surveys. All three of these survey measures were not significantly different. The TEFRA Beneficiary Satisfaction Survey recipients were asked to compare certain aspects of the health care plan their child had in the six months prior to enrolling in TEFRA to after enrolling in TEFRA. Beneficiaries had significantly fewer problems seeing a personal doctor or nurse, getting prescription medication, and getting urgent care since enrolling in TEFRA compared with the six months before enrolling in TEFRA. The composite scores for special therapy services (such as speech, occupational, and physical therapy) in the TEFRA Beneficiary Satisfaction Survey were also evaluated. On average, 90 – 91% of the TEFRA survey

beneficiaries had no problem receiving special therapy services. This measure has remained stable over the four years evaluated (2018 – 2021). Based on these seven evaluated Beneficiary Satisfaction Survey measures, being enrolled in TEFRA proved to be more advantageous for these beneficiaries to receive equal or better access to health services under the TEFRA program.

Overall, the analysis derived from the TEFRA interim evaluation design shows the TEFRA-like demonstration continues to succeed in providing the needed care to enrolled beneficiaries. The well-established program has shown growth and stability since inception. The entirety of the Arkansas TEFRA-like interim evaluation report includes findings regarding the effectiveness of the demonstration and a comprehensive review of all four goals.

II. General Background Information

Demonstration Overview

History

The TEFRA of 1982 gave individual states the option to provide health care benefits to children living with disabilities and with a family income 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 resulted in the recommendation for Section 134 of the TEFRA.

Prior to 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[1] was originally approved on October 17, 2002, and implemented on January 1, 2003. Following the initial five-year

[1] https://humanservices.arkansas.gov/divisions-shared-services/medical-services/healthcare-programs/tefra/.

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 receive 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 a family's income. This effectively passes a portion of the cost to the eligible child's family. Families with annual incomes at or below 150% of the federal poverty level (FPL) are exempt from the premium requirement, and program eligibility is determined solely on the assets and resources of the child.[2]

Current

The original request for a three-year extension renewal for the TEFRA-like Demonstration Waiver (with no program change) was provided to Centers for Medicare & Medicaid Services (CMS) on June 30, 2017. The review/approval process for the extension renewal application was not completed by the December 31, 2017, end date of the May 12, 2015 – December 31, 2017 demonstration period. Therefore, initially, CMS approved an extension of the demonstration through April 30, 2018. This allowed the state additional time to complete the review/renewal process. Also, this allowed time for the new renewal period for the Special Terms & Conditions (STC) 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). On May 9, 2018, CMS approved the demonstration extension request for a period of five years, spanning through December 31, 2022. Since the initial TEFRA Demonstration Waiver approval in 2003, the state was only given the option of three-year renewal periods. This changed during the last renewal request, when the state was offered a five-year renewal option, which the state opted to accept. The TEFRA extension renewal was approved on May 9, 2018, for a demonstration period from May 9, 2018 – December 31, 2022. However, on June 30, 2022, Arkansas submitted a five-year extension application for the Arkansas TEFRA-like demonstration. The current demonstration at the time of the TEFRA Evaluation Design Report expired on December 31, 2022. On November 28, 2022, CMS approved temporary extension of 1115 demonstration. This demonstration is for the period January 1, 2018 - December 31, 2023.

No program changes were made in the TEFRA-like Demonstration Waiver since CMS approved the evaluation design on September 26, 2019. In accordance with CMS' demonstration requirement, the Arkansas Division of Medical Services (DMS) accepted a five-year renewal option for the demonstration. A draft of the interim evaluation report for the TEFRA-like demonstration must be developed one year prior to the end of the demonstration as described in STC 51. The state must submit the final interim evaluation report 60 days after receiving CMS comments on the draft interim evaluation report. The

[2] https://humanservices.arkansas.gov/divisions-shared-services/medical-services/healthcare-programs/tefra/tefra-premiums-how-much-will-i-pay/

measurement period for the interim evaluation report is 2018 – 2021 for claims-based data and satisfaction survey-based outcomes. **Appendix C** includes more information on dates of service included in the interim report, as listed on "Measurement Period" row for each measure table.

Target Population

The target population impacted by the TEFRA-like demonstration includes all beneficiaries, covered under Title XIX of the Social Security Act in the State of Arkansas that are ages 18 or younger, 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 includes enrolled TEFRA-like beneficiaries meeting all 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 are 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.

Comparison Populations

The comparison population consists of Medicaid non-TEFRA-like program beneficiaries of similar age and beneficiary primary diagnosis conditions (as described under criteria [g] below) as the TEFRA-like

population. The claims-based comparison population of enrolled Medicaid non-TEFRA-like beneficiaries includes those beneficiaries that 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, which include 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

III. Evaluation Questions and Hypotheses

Demonstration Goals

The interim evaluation report includes findings regarding the impacts of the demonstration on the quality and affordability of health care for all children eligible for the program (promoting the objectives of Title XIX). It explores and evaluates the effectiveness of the demonstration for each research hypothesis, as provided in the evaluation design report.

- ***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 measure(s). Included in the evaluation design (see **Appendix C**) are the demonstration's performance set of outcome and satisfaction measures over time. This is relative to a comparable population in the Arkansas Medicaid program, where applicable. Each measure includes the numerator and denominator descriptions, the data sources, and the analytic method used to test the hypotheses. Both cross-sectional and sequential trend analyses were used, depending on whether the measure spanned a single point in time or multiple points in time, along with the specific research hypothesis being addressed. In learning from the previous evaluation design, interim/final reports, and experience of state specific data, Arkansas has value-added components to its current evaluation design and interim evaluation. For example, Arkansas included specific TEFRA-like DMS homegrown measures for interim evaluation findings (see **Appendix C** Measure 2.2a as an example). TEFRA-like population homegrown measures were developed with oversight from Arkansas' Medical Director and derived from an exploratory analysis of CY2016 findings. This evaluation report does not expand on the earlier demonstration evaluation findings due to a different set of measures and the previous comparison population including an ARKids First A population.

Driver Diagram

The driver diagram is included to help clearly depict the fundamental relationship between the primary drivers, secondary drivers, and ultimate aims of the demonstration. This is an important aspect to determine if the demonstration is achieving each of the state's four goals. To provide a visual display of DMS's evaluation design of what "drives" or contributes to the achievement of the demonstration goals, the 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 equal or better access to speech, occupational, and physical therapy services. Claims-based and survey-based measures of speech, occupational, and physical therapy services are the secondary drivers. From the claim's side, this captures the utilized speech, occupational, and physical therapy services in the doctors' offices. From the caretaker's viewpoint on the survey's side, this captures a child enrolled in TEFRA not having a problem getting the needed therapy services. One moderating factor examines the high volume of third-party liability (TPL) coverage of enrolled TEFRA-like beneficiaries.

Evaluation Hypotheses and Research Questions

The TEFRA-like demonstration's four goals showcase CMS' three-part aim of better care for individuals, better health for population, and lower costs. The interim evaluation follows these goals as descripted in 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

The DMS mission statement is as follows: "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 IE's intent of evaluating the success of the demonstration through analysis of health services used by the TEFRA-like beneficiaries as compared to the non-TEFRA-like beneficiaries. Under **Goal 1**, the evaluation assesses the utilization rates of speech, occupational, and physical therapy services of TEFRA-like beneficiaries. The evaluation also assesses how these rates are similar or better compared to non-TEFRA-like beneficiary rates. **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? Do 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? 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**, the frequency of gaps in TEFRA-like coverage and the average length (in months) a TEFRA-like beneficiary is enrolled are 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 reviewed the percentage of newly enrolled TEFRA-like beneficiaries that received therapy services within 60 days of enrollment. A marker for timely preventative care is a beneficiary's experience obtaining care right away. As described in the "Driver Diagram" section, most TEFRA-like beneficiaries have third-party liability coverage. Therefore, the state researched what parts of the state have high and low percentages of TPL coverage. Another indicator for appropriate preventative care examines the percent of TEFRA-like beneficiaries who have durable medical equipment (DME) 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

Under **Goal 3**, patient experience over time with the TEFRA-like demonstration program is assessed by analyzing responses from the TEFRA Beneficiary Satisfaction Survey domains of “Getting care quickly,” “How well doctors communicate,” and “Overall health care.” An indicator for comparing the TEFRA-like plan with other health plans is used to investigate the impact on patient experiences of health care services. This is determined by comparing survey responses six months prior to enrollment (pre-TEFRA) to survey responses post enrollment (post-TEFRA) 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

The financial burden of the TEFRA-like premiums is an important way to gauge beneficiaries' experiences on health care access and financial impact. This is analyzed from the respondents that perceived premiums as a financial burden on the TEFRA Beneficiary Satisfaction Survey. Also, the reported TEFRA-like premium range is studied over time to determine 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 for 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 patient's experience vary by common diagnosis?

IV. Methodology

Evaluation Design

Arkansas analyzed the hypotheses and drivers described in **Appendix B** to address the four goals, as listed in the approved STC document. By examining the hypotheses and research questions listed in the "Evaluation Hypotheses and Research Questions," the IE assessed 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 helps assess the desired evaluation outcome and measure. Survey-based outcomes (more on surveys discussed below) are in a standardized form, comparable to and compared against national values, where applicable. The evaluation design examines the demonstration's performance on a set of outcomes and measures, along with the beneficiary's experience scores for accessibility, therapy services, overall health care, financial burden on TEFRA-like premiums, and other relevant scores. DMS and the evaluation IE use multiple data sources for the nine

hypotheses and 28 research questions. The interim evaluation report and evaluation design provide details of data sources on collected data for both administrative and Consumer Assessment of Healthcare Providers and Systems (CAHPS) or CAHPS-like survey-based data. The analytic methods offer quantitative or qualitative approaches to answer the research questions. Both cross-sectional and sequential trend analyses are used, depending on whether the outcome or measure spans one point in time or multiple points in time.

Target and Comparison Populations

The target population (TEFRA-like population) includes all beneficiaries covered under Title XIX of the Social Security Act in the State of Arkansas that are ages 18 or younger, 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 (non-TEFRA-like population) includes similar age and beneficiary diagnosis characteristics as the TEFRA-like population. The comparison population is used for selected claims-based outcomes and measures.

Differences Between Target and Comparison Groups:

The TEFRA-like population does not have financial limitations for inclusion to the program; however, premiums are based on income. The non-TEFRA-like population does not pay premiums but must qualify for the Arkansas Medicaid program based on the Federal Poverty Level (FPL) thresholds.

1) **Age:**

- The demographic information of the target group, the TEFRA-like population, during CY2018 through CY2021 represented almost 60% of beneficiaries between 0 to 8 years of age.
- The demographic information of the comparison group, the non-TEFRA-like population, during CY2018 through CY2021 represented over two-thirds the beneficiaries between 9 to 18 years of age, with males making up 55% of the non-TEFRA-like population (see **Table 1**).

2) **Gender:**

- Males make up almost two-thirds of the TEFRA-like population (see **Table 1**).
- Over the four measurement periods, the non-TEFRA-like population has, on average, 8% more females.

Table 1:TEFRA-Like vs. Non-TEFRA-Like Demographics for CY2018 - CY2021

Demographics		Year 1 Measurement Period (CY2018)		Year 2 Measurement Period (CY2019)		Year 3 Measurement Period (CY2020)		Year 4 Measurement Period (CY2021)	
		TEFRA-Like Results	Non-TEFRA-Like Results	TEFRA-Like Results	Non-TEFRA-Like Results	TEFRA-Like Results	Non-TEFRA-Like Results	TEFRA-Like Results	Non-TEFRA-Like Results
Age Groups	0-4 years	29.6%	8.4%	29.0%	8.3%	27.9%	7.7%	26.6%	7.6%
	5-8 years	29.5%	22.6%	30.4%	22.5%	31.0%	21.3%	31.6%	20.6%
	9-12 years	20.4%	30.6%	20.6%	29.9%	20.1%	29.3%	20.4%	28.2%
	13-18 years	20.5%	38.5%	19.9%	39.4%	21.0%	41.6%	21.4%	43.6%
Gender	Female	34.1%	42.0%	34.3%	42.5%	35.1%	43.6%	35.4%	45.3%
	Male	65.9%	58.0%	65.7%	57.5%	64.9%	56.4%	64.6%	54.7%
Region	Central	37.3%	26.8%	36.4%	26.8%	35.9%	26.6%	36.1%	26.3%
	Northeast	16.7%	23.7%	17.3%	22.9%	17.3%	22.9%	16.4%	22.7%
	Northwest	37.9%	29.6%	38.5%	30.4%	38.8%	31.3%	38.9%	32.0%
	Southeast	2.9%	9.3%	2.9%	9.0%	2.9%	8.4%	2.7%	8.0%
	Southwest	5.1%	10.5%	4.9%	10.8%	4.8%	10.5%	4.7%	10.4%

3) Region:

- Three-fourths of the TEFRA-like population resided in the Central and Northwest regions (75.2% during CY2018, 75.0% during CY2019, 74.7% during CY2020, and 75.0% during CY2021). During CY2018 through CY2021 over 61% of the TEFRA-like population resided in the following six urban counties: Benton, Craighead, Faulkner, Pulaski, Saline, and Washington.

- Over 80% of the non-TEFRA-like population resided in Central, Northeast, and Northwest regions of the state during all four reporting years. While almost 40% of the non-TEFRA-like population resided in the following six urban counties: Benton, Craighead, Garland, Pulaski, Sebastian, and Washington.

- Arkansas regions of Northwest, Northeast and Central are more populated areas of urban counties versus other areas of the state (Southwest and Southeast) with less populated areas of rural counties. Outcomes for PCP visits and utilizing therapy services could impact access to care for beneficiaries living in the rural counties.

- **Figure 1** depicts the county and region delineations of the state of Arkansas's

metropolitan areas based on the 2020 Census Bureau's Metropolitan Statistical Area (MSA)[3]. In the state of Arkansas, 74% of the counties are rural, while 26% are urban. This includes the Central region, which is 100% urban, while the other four regions contain a mix of urban and rural populations. The Northwest and Southwest regions have 32% of their counties urban, the Southeast is 21% urban, and the Northeast is 17% urban. The following counties by region are urban:

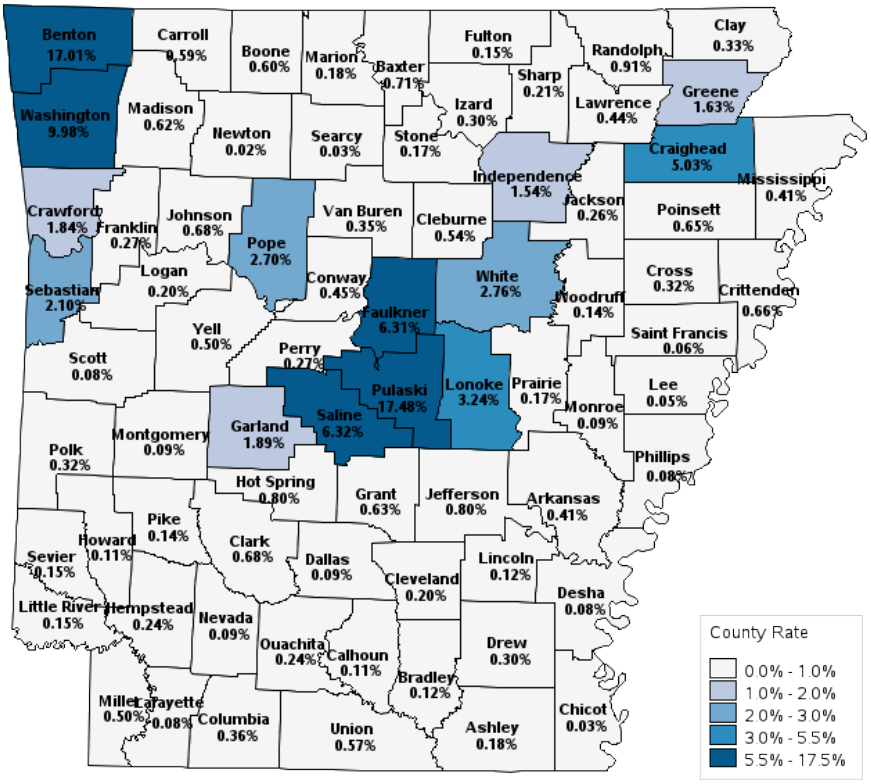
- Northwest: Benton, Crawford, Franklin, Madison, Sebastian, and Washington
- Northeast: Craighead, Crittenden, and Poinsett
- Central: Garland, Grant, Faulkner, Lonoke, Perry, Pulaski, and Saline
- Southwest: Little River and Miller
- Southeast: Cleveland, Jefferson, and Lincoln.

Figure 1: Arkansas State Region, County, and Urban/Rural Map

[3] https://www2.census.gov/programs-surveys/metro-micro/reference-maps/2020/state-maps/05_Arkansas_2020.pdf

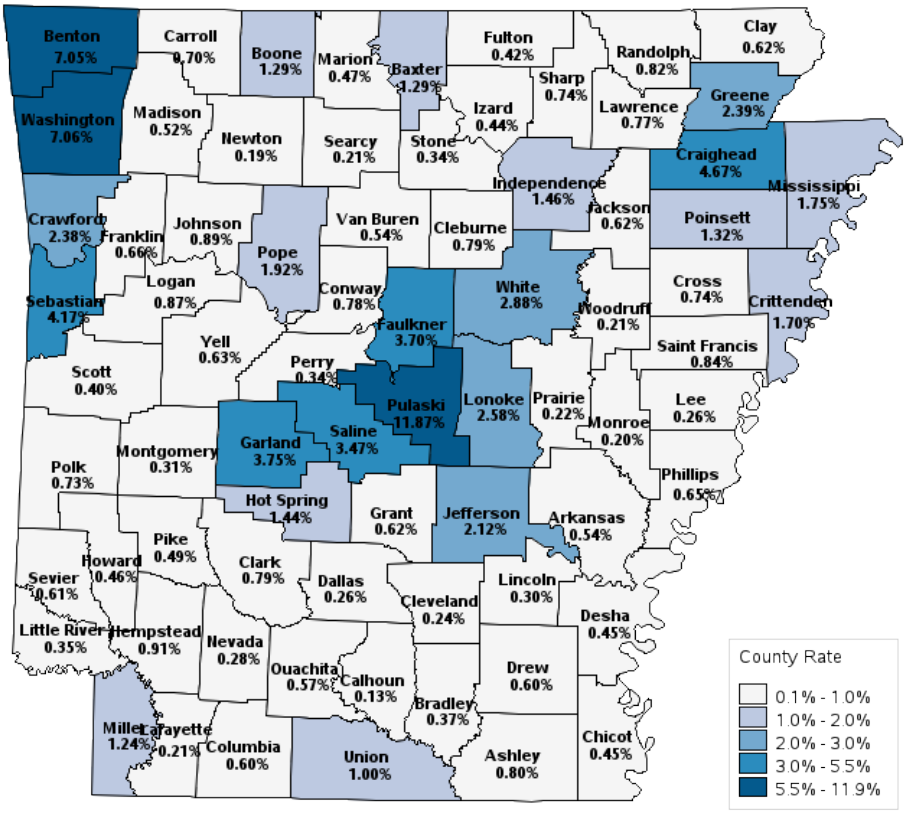
- The highest percentage of CY2021 TEFRA-like enrollment occurred in Faulkner, Pulaski, and Saline counties, urban MSA Central region, and Benton and Washington counties, urban MSA Northwest region, as shown in **Figure 2**. The coverage of these five counties represented over 57% of enrolled TEFRA-like beneficiaries during CY2021. Almost 35% of enrolled TEFRA-like beneficiaries resided in the top two counties of Benton and Pulaski.

Figure 2: TEFRA-Like Population - Percentage of Beneficiaries Enrolled by County for CY2021



- The percentage of enrolled CY2021 non-TEFRA-like beneficiaries was comparable to TEFRA-like coverage in urban MSA Central and Northwest regions but included slightly higher enrolled beneficiaries in Northeast region (see **Figure 3**). Of the enrolled CY2021 non-TEFRA-like beneficiaries, 26% reside in Benton, Pulaski, and Washington counties where Benton and Pulaski counties represent same top two counties identified in CY2021 TEFRA-like enrollment.

Figure 3: Non-TEFRA-Like Population - Percentage of Beneficiaries Enrolled by County for CY2021



For additional information regarding 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 was to review relevant material from other states. For consideration within future design evaluation reports and to serve as background information, this material was reviewed.

Evaluation Period

The measurement period for the interim evaluation report was initially years 2018 – 2019. The updated measurement period for the interim evaluation report now includes years 2018 – 2021. The initial draft of the interim evaluation report was submitted to CMS on December 31, 2021, and the updated draft of the interim evaluation report was submitted on May 31, 2023. This includes both claims-based and survey reporting timeframes, with the time origin representing over five months prior to the demonstration renewal on May 9, 2018. Previously, the demonstration was set to expire on December 31, 2022. On November 28, 2022, CMS approved temporary extension of 1115 demonstration. This demonstration will now expire December 31, 2023. The summative

(final) evaluation report will consist of years 2018 – 2023 and will be provided by June 30, 2025. **Appendix C** includes more information on the dates of services included in the interim evaluation report. This will be included in the summative evaluation report, as listed on the "Measurement Period" row for each measure table.

Evaluation Outcomes and Measures

Appendix C exhibits the interim evaluation outcome and measure description names, along with numerator and denominator descriptions. The analyses use data from publicly available national surveys, where applicable for benchmarking. Outcomes examined include quality of care, access to health care, health outcomes, and beneficiary experience. Also, Arkansas uses nationally selected interim evaluation measures, where applicable, 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.

Data Sources

DMS and the IE consumed multiple sources of data to assess the research hypotheses. The interim evaluation report leverages claims-based administrative data, enrollment data, and survey-based scores, as applicable. Data analytics is performed without direct engagement from DMS, as to avoid biased opinion or skewed results.

Administrative Data

Administrative data sources include an automated weekly data feed and loading process from the Arkansas Medicaid Management Information System (MMIS) vendor. This data consists of claims, provider, beneficiary, and pharmacy data subject areas. The use of Medicaid Fee-for-Service (FFS) claims were limited to final, paid status claims. Interim transaction and voided records were excluded from all reporting periods within the evaluation because these types of records introduce a level of uncertainty that can impact reported rates. The IE used raw, full sets of Medicaid data. To ensure accurate and complete data, a full 12-month claims run out was utilized for analysis by the IE. This allowed all claims to be processed through MMIS. The IE followed Healthcare Effectiveness Data and Information Set (HEDIS®) or CMS Core Set national specifications for related measures. Applicable claim types, such as institutional, professional, and pharmacy claims, were used to calculate the various evaluation design measures. Beneficiary demographic files were used to assess beneficiary age, gender, and other demographic information. Eligibility files were used to verify a beneficiary's enrollment in the

[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.

State's Medicaid programs. Each measure (see **Appendix C**) associated with each research hypothesis lists the data source(s) used in addressing it.

TEFRA-Like Closure Data

Originally, the evaluation design described to identify top five closure reasons from the TEFRA Disenrollee Beneficiary Survey (see "Survey Data") but no longer being administrated. Thus, TEFRA-like closure data will be incorporated. As part of TEFRA-like program, DMS tracks beneficiaries whose case has been closed due to voluntary or involuntary reasons. On an annual basis, closure lists including reason codes, descriptions and counts will be provided to IE. Information in the TEFRA-like annual closure data will be used to analyze the top five reasons why TEFRA-like beneficiary cases were closed.

Survey Data

TEFRA Beneficiary Satisfaction Survey

The TEFRA Beneficiary Satisfaction Survey is designed and based on the CAHPS® 5.0H/5.1H Medicaid Child survey. It 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. This information addresses the 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 DMS. This has been done in collaboration with the Arkansas Foundation for Medical Care (AFMC), a National Committee for Quality Assurance (NCQA) Certified HEDIS® survey vendor. All beneficiaries in the TEFRA-like demonstration were included in the analyses. The TEFRA survey follows a traditional NCQA sampling strategy—1,650 beneficiaries are randomly selected from the 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. This is administered on an as needed basis and is a CAHPS-like survey. The survey was modeled after the CAHPS® 5.0H Medicaid Child survey. This additional survey was only conducted in 2018 by the survey vendor and it was used to assess the impact of premium contributions. It accomplished this by asking additional questions of beneficiaries disenrolled from the program. Results provided important information about TEFRA premiums and the experiences of those that lost TEFRA coverage. The disenrollee survey looks at the reasons TEFRA beneficiaries were disenrolled and if disenrollment was voluntary. Beneficiaries

with a break of at least one month in previous years' premium payments were identified. This included all TEFRA beneficiaries with premium payment amounts ranging from $0 to $458. TEFRA beneficiaries that showed premium payments for all 12 months in the 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 First A and ARKids First B Beneficiary Satisfaction Surveys

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

The ARKids First A Beneficiary Satisfaction Survey is a CAHPS® 5.0H/5.1H Medicaid child survey and is currently conducted every two years. Therefore, during a year that ARKids First A is not conducted, the previous year's survey results are utilized for comparison purposes. The CAHPS 5.0H/5.1H Medicaid child survey included five composite measures, four rating questions, two question summary rates, and five effectiveness of care measures. NCQA guidelines require each beneficiary be enrolled for a minimum of six months, with no more than one gap in enrollment 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. 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, along with the CAHPS 5.0H/5.1H survey to assess beneficiaries' experiences with their health plans. The ARKids First B Beneficiary Satisfaction Survey included five composite measures, six rating questions, and two summary rates. The 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 were used. This is because the enrollment data is reported monthly. The sampling frame consisted of all ARKids First B PCCM enrollees ages 17 and younger at 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. Only one beneficiary per household was selected.

Medicaid Beneficiary Survey Comparison

A comparison group of selected measures for the survey-based questions (i.e., timely and appropriate preventive care) use a variety of state driven beneficiary satisfaction surveys. For example, selected composite individual scores (i.e., *Getting care quickly* and *How well doctors communicate*) and individual scores (i.e., *Rating of health care*) from the TEFRA beneficiary satisfaction survey results, if applicable, is compared to ARKids First A and First B beneficiary satisfaction survey results. Also, TEFRA disenrollee beneficiary survey results were only available in 2018 and not in 2019. This is compared to TEFRA beneficiary satisfaction survey individual scores in the domain of *Special equipment and supplies*. For comparison purposes, evaluation survey results reviewed national survey results provided by National CAHPS Benchmarking Database (NCBD) (see **Appendix C**, under "National Benchmark" row for applicable measures). The NCBD is a national repository funded by the Agency for Healthcare Research and Quality (AHRQ). It contains data from the CAHPS health plan survey to provide comparative data on health plans. Benchmarking survey scores calculated by NCBD reflected only the most positive response. Therefore, the ARKids First A composite and ARKids First B composite and ratings were not able to be used for comparison purposes. For the benchmark composite and summary questions, only the response choices of "always" or "yes" were provided by the survey vendor. In the ratings questions, response choices of "9" and "10" were provided by the survey vendor. For the purposes of this evaluation, only the response choices of "usually" or "always" were used for the survey composite and summary questions. In the rating questions, responses choices of 8, 9, or 10 for overall health care were used.

Analytic Methods

The interim evaluation uses univariate and bivariate analyses to test the hypotheses associated with the goals of the TEFRA-like program and related research questions. Univariate analyses are used to compute measures 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 interim evaluation discusses the generalization of results in the context of data limitations. Statistical testing, such as t-tests (i.e., Wilcoxon-Mann-Whitney test) and chi-square testing, with 95% confidence intervals are utilized. **Appendix C** specifies the comparison strategies, descriptions of outcomes and measures, high-level technical specifications, data sources, and analytical approaches for each hypothesis. Appropriate statistical analyses are selected for each hypothesis.

Cross-sectional analysis (such as the Wilcoxon-Mean-Whitney test) and longitudinal data analysis are the two main analytic methods used to determine if beneficiaries in the TEFRA-like population are doing as well, or better than, non-TEFRA-like Medicaid beneficiaries with selected primary diagnosis conditions on various measures in the evaluation. The Wilcoxon-Mann-Whitney test is used for TEFRA-like vs. non-TEFRA-like single group methods of assessment. This test is also used for cross-sectional comparisons

of two groups, at one point in time, for event-based measures. Chi-squared tests are used on beneficiary-based measures. A chi-squared test is used to compare the proportion of respondents' experiences on selected questions (from TEFRA beneficiary satisfaction survey) against similar questions (from Medicaid ARKids First A and ARKids First B beneficiary satisfaction surveys). The longitudinal nature of the data is exploited to establish trends in outcomes for the TEFRA-like population trend.

V. Methodological Limitations

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 impacted the choice of evaluation approaches include the following: 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 where a similar group can be compared year over year is difficult to establish. Additionally, since the program has a 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. They include survey comparisons of TEFRA beneficiary satisfaction survey results against ARKids First A and First B beneficiary satisfaction survey results. Survey-based beneficiary level data are not available to the IE. Survey results were used from the survey vendors' executive summary reports[6]. This limitation involved using chi-squared testing strictly for survey score comparison over time, and for other applicable survey results. Where feasible, evaluation survey results incorporate national survey results (provided by the NCBD) for comparison purposes. The interim evaluation has limitations surrounding the lack of a truly comparative TEFRA-like population for selected measures. TEFRA-like enrollees may not have prior Medicaid coverage. Thus, there are limitations surrounding baseline values for the evaluation design measures. The interim evaluation treats Year 1 of the current demonstration performance period, 2018, as a baseline to measure changes over the course of the demonstration. Also, the evaluation analyzes survey scores for a patient's experience of their health care plan within the six months prior to enrollment in TEFRA (pre-TEFRA). This is compared to post enrollment within a TEFRA health plan (post-TEFRA). In addition, the evaluation conducts an in-state analysis that compares a TEFRA-like population to a comparison group with similar primary diagnosis conditions. Another drawback related to surveys is obtaining scores on an annual basis for the purpose of comparison to the ARKids First A Beneficiary Satisfaction Survey. It's challenging to compare

[6] https://afmc.org/health-care-professionals/arkansas-medicaid-providers/surveys-and-reporting/.

between the two different surveys since one is conducted every two years and other survey is conducted on an annual basis.

VI. Results

Goal 1: Improve access to care

"Ensuring that demonstration enrollees have equal or better access to health services compared to the Medicaid fee-for-service population." The IE examined each year of the demonstration period for the TEFRA-like beneficiaries' access to health care (therapy services, perception of access to services and medication coverage).

- Patterns in therapy trends were consistent among both TEFRA-like and non-TEFRA-like beneficiaries over the interim evaluation period.
- Physical therapy was the most utilized therapy service at above a 50% utilization rate for the TEFRA-like population.
- All therapy services saw a decline in CY2020 that stayed consistent in CY2021.
- No significant difference between years were noted for the TEFRA Beneficiary Satisfaction Survey composite score for "no problem getting special therapies."
- The non-TEFRA-like population showed higher results for CY2018 through CY2021 when compared to the TEFRA-like population for access to PCP visits.
- The interim results demonstrate the TEFRA-like population had a higher rate of beneficiaries with Proportion of Days Covered (PDC) at least half the time on prescriptions compared to the non-TEFRA-like population.
- Except for the Southwest region, a decrease in the rate of the target group that met the PDC threshold of 50% between CY2018 and CY2019 were observed. An increase between CY2019 and CY2020 for all regions, except the Southwest region, where the rate decreased were revealed in the data. Rates then trended upward between CY2020 and CY2021 for all regions, except the Northeast region, which exposed a decrease.
- The TEFRA-like population had a higher average cost per prescription (average $160) across all years compared to the non-TEFRA-like population (average $75).

- The TEFRA-like group consistently had a higher average cost per patient in females compared to males for CY2018 through CY2021.

- For TEFRA-like beneficiaries, the PBPM was significantly lower when compared to the non-TEFRA-like beneficiaries across the interim period.

- A higher percentage of the target group were taking at least two anti-seizure medications compared to the non-target group for CY2018 through CY2021.

Overall interim results for the demonstration period concluded TEFRA-like beneficiaries had significantly higher utilization rates when compared to the non-TEFRA-like beneficiaries; therefore, TEFRA-like beneficiaries had better access to health services. Therefore, because of the utilization of services and high satisfaction, our recommendation is to continue the state's work to address **Goal 1**. Further explanation for our recommendation is in the hypotheses and conclusion sections of this document.

Goal 2: Access to preventative care

"Ensuring demonstration enrollees have access to timely and appropriate preventive care." The IE examined each year of the demonstration period for the TEFRA-like beneficiaries' access to timely preventative health care.

- Overall, rates for first healthcare visit to PCP within 60 days after enrollment decreased in last two years for all demographics after a slight spike in CY2019.

- First healthcare visit for therapy services within 60 days after enrollment displayed a trending decrease from CY2018 through CY2021.

- The target population had an overall average length (in months) enrolled in the program of 10 out of the 12-month measurement period during CY2018 through CY2020, but in CY2021, the average length increased to 11 out of 12 months.

- On average during the interim evaluation period, 72.6% of the target group had at least one Medicaid claim paid by TPL coverage.

- In reviewing who had at least one Medicaid claim paid by TPL coverage, females slightly outperformed males on average for children and adolescents when compared within each population across all years.

- The TEFRA-like population had over 60% beneficiaries in all regions with TPL coverage, compared to the non-TEFRA- like population that has had less than 26%. Over time, the Southeast region has had the least number of beneficiaries (n < 200) with TPL in the TEFRA-like population.

- The TEFRA-like population has a substantial amount of higher DME beneficiaries across all years compared to the non-TEFRA-like population. Although there is a significant difference in DME coverage between the two populations, the gap between populations is beginning to close with the consistent decline in the TEFRA-like population.

The evaluation for utilization of preventive care service and access to care for newly enrolled Arkansas TEFRA-like beneficiaries found this population had decreased access to timely first health care and first therapy visits over the interim period. Findings for the demonstration interim period concluded TEFRA-like beneficiaries had significantly higher or same utilization and coverage rates when compared to the non-TEFRA-like beneficiaries; therefore, TEFRA-like beneficiaries had better or the same appropriate preventive care. Findings for the demonstration interim period concluded TEFRA-like beneficiaries had significantly higher or same average length in coverage segments over time. When compared to the non-TEFRA-like beneficiaries for TPL coverage, TEFRA-like beneficiaries had better coverage for appropriate preventive care. Therefore, our recommendation is to continue the state's work to address **Goal 2**. Further explanation for our recommendation is in the hypotheses and conclusion sections of this document.

Goal 3: Beneficiaries' perception and satisfaction with their care

"Ensuring enrollment in the demonstration increases beneficiaries' perceived access to health care services and experience in the quality of care received." The IE examined each demonstration year's beneficiary perception of the services that were received. When examining the TEFRA, ARKids First A, or ARKids First B Beneficiary Satisfaction Surveys, the results show the following:

- The TEFRA-like beneficiaries' experience of "getting care quickly" (obtaining care right away for an illness/injury/condition) has stayed consistent, except for a slight drop in CY2020, which could be attributed to the COVID-19 pandemic.

- In comparing the TEFRA Beneficiary Satisfaction Survey vs. the ARKids First A or ARKids First B Beneficiary Satisfaction Surveys, there was no significant difference found in the scores for "getting care quickly," "how well doctors communicate," and "overall health care."

- In addition, beneficiaries reported fewer problems seeing a "personal doctor or nurse" and

had fewer problems getting prescription medications/urgent care post-TEFRA vs. pre-TEFRA (significantly different).

Therefore, due to this high satisfaction and perceived access to health care services of the TEFRA program, it is our recommendation based on the results of the beneficiary satisfaction survey scores the state should continue this work to address this **Goal 3**. Further explanation for our recommendation is in the hypotheses and conclusion sections of this document.

Goal 4: Affordability of TEFRA premiums

"*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."* The IE examined each demonstration year the TEFRA premiums and barriers to beneficiaries being on TEFRA.

- There has been a 4% decline in the percentage of TEFRA-like beneficiaries from 2018 to 2021 who indicated a "big financial burden" to pay TEFRA premiums in the last six months.
- Over half of TEFRA survey respondents marked it was a small or big financial burden to pay monthly TEFRA program premiums in 2021. Of those 456 respondents, 33, or 7.2%, indicated on the 2021 survey the TEFRA premiums were a "big financial burden."
- Based on survey responses, when comparing 2018 through 2021, the TEFRA premium range of $364 - $416 contained the highest average big financial burden response percentages. Of the 33 who responded to the TEFRA premiums survey question, the highest response rate for "big financial burden" was the $208 - $250 premium rate in 2021.
- The following were consistently among the reasons a TEFRA-like beneficiary's case was closed from CY2018 through CY2020:
    1. Eligible another category,
    2. Failed to provide information,
    3. Child reached age limit

Therefore, our recommendation is to continue to review of the survey structure for TEFRA monthly premium ranges and family changes in income. Another recommendation is to regularly monitor reasons why TEFRA-like cases are closed with clear descriptions of voluntarily and unvoluntary disenrollment reasons.

Hypothesis 1.1

For **Hypothesis 1.1,** the IE assessed if Arkansas TEFRA-like beneficiaries have equal or better access to health services compared to the Medicaid FFS population (Medicaid non-TEFRA-like). In summary for **Hypothesis 1.1**, all three therapy services in the TEFRA-like population sustained a higher utilization rate during CY2018 through CY2021 when compared to the Medicaid non-TEFRA-like population. This indicates that Arkansas TEFRA-like beneficiaries had better access to special therapies health services than the Medicaid non-TEFRA-like population. Satisfaction remained high among all three therapy services (around 90% in all four years).

For the first part of **Question 1.1a**, the IE states the claim-based rates for TEFRA-like beneficiaries receiving speech, occupational, and physical therapy services. **Figure 4**[7] results show all three therapy services in the TEFRA-like population sustained a higher rate during all four calendar years when compared to the non-TEFRA-like population (significantly different for each year's comparison).

- Utilization of therapy rates remained consistent for each therapy service during CY2018 and CY2019 but dropped in CY2020 in both the TEFRA-like and non-TEFRA-like populations.

- During CY2020 all three therapy services were most likely impacted by the COVID-19 pandemic as these services could have been provided in school settings for both populations. Therefore, starting with CY2020 results, place of service code for telehealth along with corresponding therapy visit codes were included in evaluation analysis. Occupational therapy was the most impacted during CY2020, with a decline from 44.6% to 26.7% in the target population.

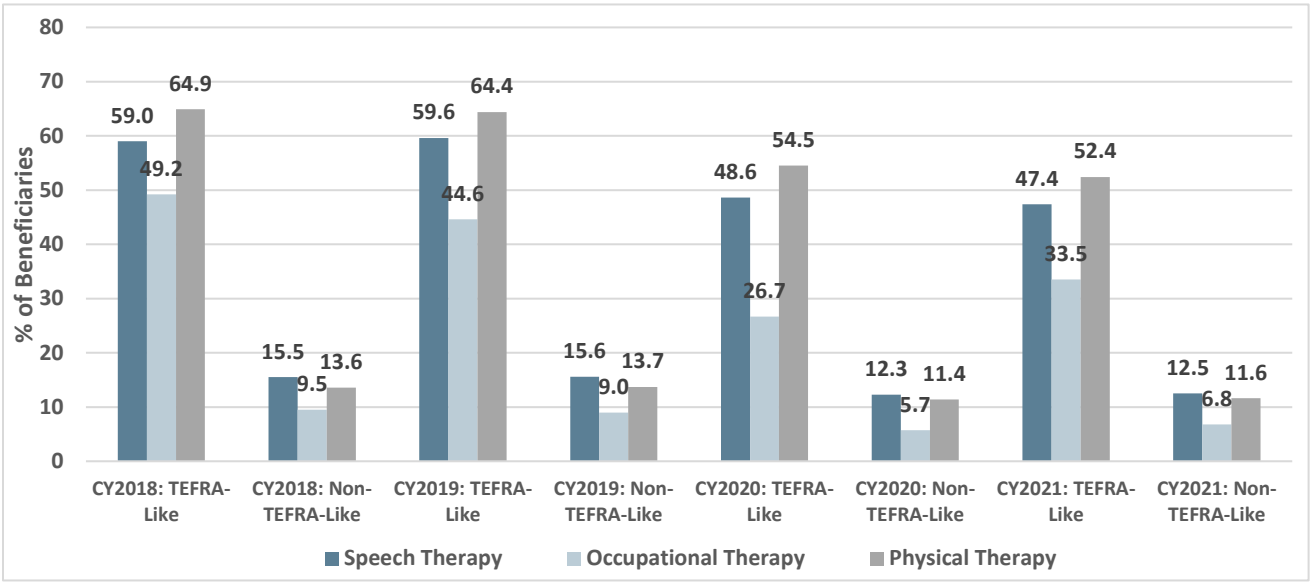
- During CY2021 the TEFRA-like population continued to decline in speech and physical therapy rates but occupational showed improved rates between CY2020 and CY2021. The non-TEFRA-like population improved on all three therapy rates between CY2020 and CY2021 (slight increase for speech and physical therapy and over absolute one percentage increase for occupational therapy).

When considering the results of **Figure 4**, an inference can be made about access to services. The TEFRA-like beneficiaries had significantly higher utilization rates when compared to the non-TEFRA-like beneficiaries. However, this can be contributed to the severity level of the TEFRA-like beneficiaries (i.e.,

[7] Figure 4 measure is defined as 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) for CY2018 – CY2021.

a higher severity of illness will equate to higher utilization of these services).

Figure 4: TEFRA-Like and non-TEFRA-Like Populations - Measure 1.1a (Claims-based therapy services) for CY2018 - CY2021



For the second part of **Question 1.1a**, the IE reviewed the impact of demographics on access to health services for speech, occupational, and physical therapy. Demographics could be impacting the access to health services for all three therapy services for the non-TEFRA-like population (see **Figure 3**). For example, a higher percentage of beneficiaries enrolled reside in rural counties compared to TEFRA-like population (see **Figure 2**). Additionally, the results show the following:

- Age group 0 - 4 years was the most negatively impacted age group during CY2020 and CY2021 for all three therapy services and both populations, which is likely due to COVID-19. However, 0 - 4 years remained the highest utilizers averaged across all four years within each specialized therapy for target and comparison groups.

- Beneficiaries in the age group 5 - 8 years were the second highest utilizers of therapy rates averaged across all years in all three services in the TEFRA-like and non-TEFRA-like populations. Beneficiaries in the age group 13 - 18 years were the lowest utilizers of therapy services during the interim period.

- Males received all three therapy services on average more frequently than females across all years in both populations.

- At least 65% of TEFRA-like population received physical therapy services in the Central, Northeast, and Northwest regions during CY2018 and CY2019 compared to less than half

(below 50%) in the Southeast region received physical therapy services. A similar pattern existed for speech and occupational therapy services where the Central, Northeast, and Northwest regions outperformed the Southeast and Southwest regions and continued disproportion for target group during CY2020 and CY2021.

- Among the five regions for the non-TEFRA-like population, the north part of the state (Northwest and Northeast regions) had slightly higher therapy rates in all three services for all four years. Whereas the southern part of the state (Southeast and Southwest regions) had lower therapy rates for all measurement periods.

Figure 5 graphically portrays the TEFRA-like population's utilization of therapy services by region across all measurement periods (CY2018 - CY2021). Among the TEFRA-like population, physical therapy was utilized the least in the Southeast region across all years compared to the other four regions. Other than a slight increase in the Southwest region in CY2021, physical therapy services have seen a consistent decline across years in all regions. Occupational therapy is utilized the least in the southern regions. Speech therapy had the highest utilization in the Central region.

Figure 5: TEFRA-Like Population by Region - Measure 1.1a (Claims-based therapy services) for CY2018 - CY2021

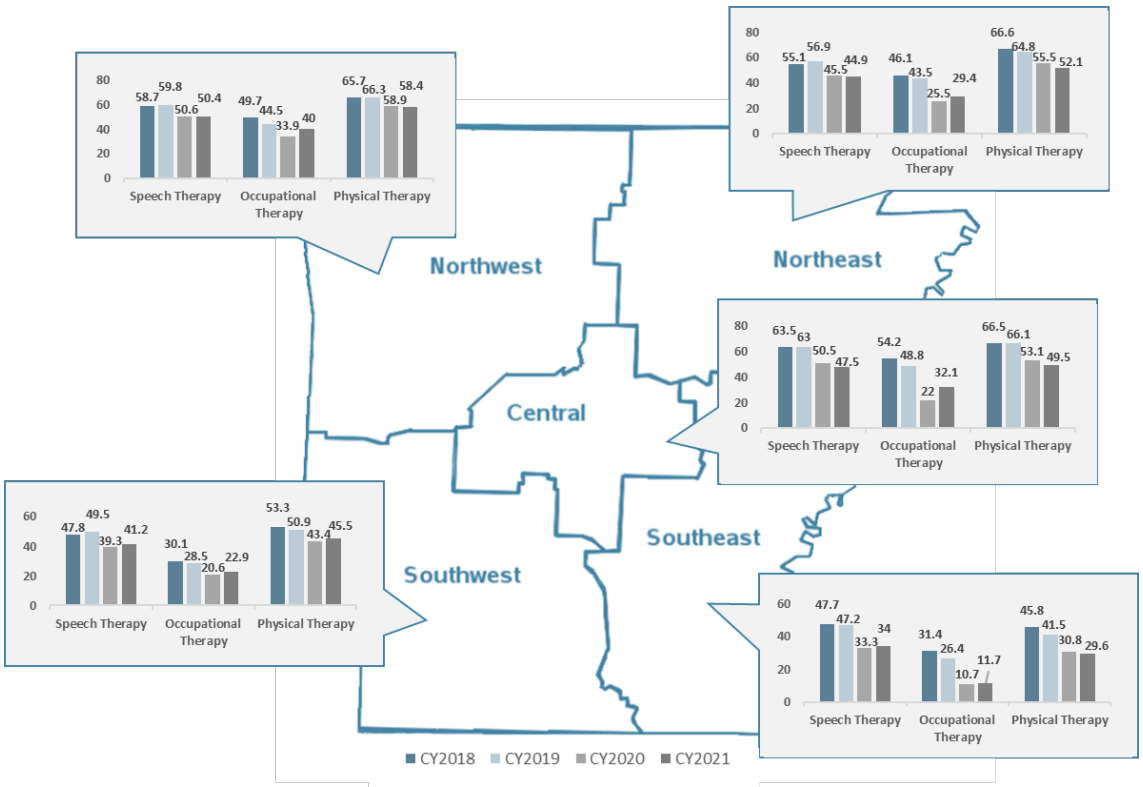
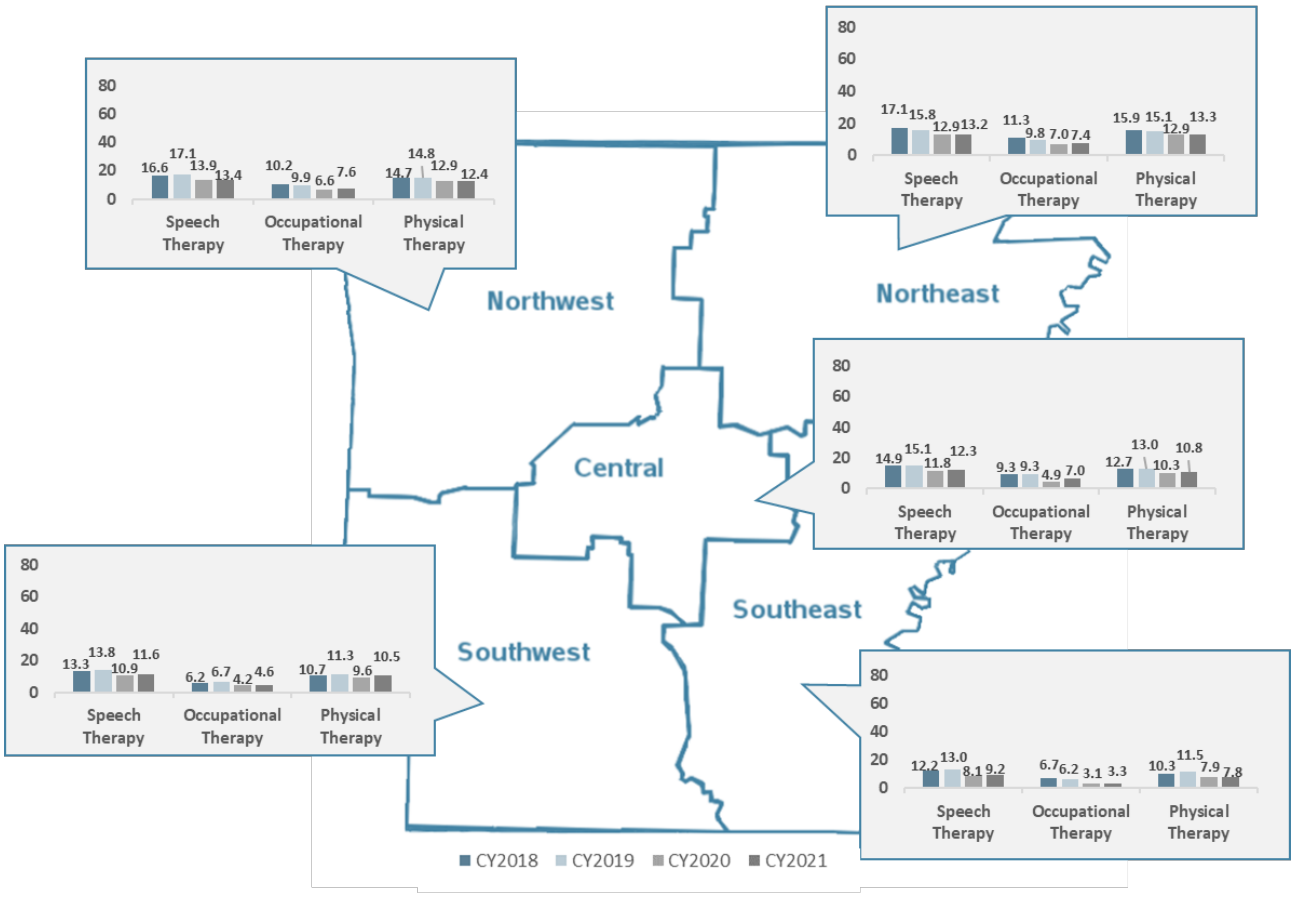


Figure 6 represents the non-TEFRA-like therapy services usage by region across all measurement periods (CY2018 - CY2021). In alignment with the TEFRA-like population, occupational therapy was least utilized in the southern regions. Unlike the TEFRA-like population, the highest utilization of speech therapy services occurred in the Northeast region. Physical therapy services in all regions showed a decline in CY2020, and all had a slight spike in CY2021, except in the Northwest and Southeast regions, which remained to decline.

Figure 6: Non-TEFRA-Like Population by Region - Measure 1.1a (Claims-based therapy services) for CY2018 - CY2021



For **Question 1.1b**, the IE investigated the TEFRA-like population's perception of their access to care by analyzing the TEFRA Beneficiary Satisfaction Survey. The measures that were utilized are the 2018 through 2021 individual and composite scores for therapy services. The results of **Table 2** show the following:

- The TEFRA Beneficiary Satisfaction Survey composite scores for "no problem getting special therapies" showed no significant difference between the performance periods.

- The survey composite scores show 90% to 91% of the TEFRA-like population, on average, has no problem getting special therapy services maintained in all four years. Almost half of the TEFRA-like population received at least one of the therapy services of speech, occupational, or physical within each year from claims-based results, except for occupational therapy during CY2020 and CY2021. Therapy service results were impacted during CY2020 most likely due to the COVID-19 pandemic since these services could have been provided in school settings.

Table 2: Measure 1.1b (Survey-based therapy services [i.e., special therapies])[8] for 2018 - 2021

Therapy Services (Survey-Based)	Scores (Percentage) "Not a problem"				Statistical Significance Testing (p < 0.05)	
	2018	2019	2020	2021	Comparisons	
Q31. Getting speech therapy	88.5%	89.5%	89.3%	89.8%	Not significantly different between 2019 vs. 2018, 2020 vs. 2018, 2021 vs. 2018, 2021 vs. 2020	
Q33. Getting occupational therapy	89.1%	90.4%	90.7%	90.3%	Not significantly different between 2019 vs. 2018, 2020 vs. 2018, 2021 vs. 2018, 2021 vs. 2020	
Q35. Getting physical therapy	91.2%	89.4%	92.7%	90.3%	Not significantly different between 2019 vs. 2018, 2020 vs. 2018, 2021 vs. 2018, 2021 vs. 2020	
Total (Composite) (Special therapies)	**89.6%**	**89.8%**	**90.9%**	**90.1%**	**N/A**	**N/A**

For **Question 1.1c**, the IE analyzed the access/utilization to PCPs for TEFRA-like beneficiaries:

- The percentage of TEFRA-like beneficiaries,12 months to 6 years, who had a visit with a PCP was significantly different (lower) than the non-TEFRA-like beneficiaries for all four years. Adolescent TEFRA-like beneficiaries, 7 - 11 years, was only significantly different (lower) to adolescent non-TEFRA-like beneficiaries during CY2018 and other three years not

[8] 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 for 2018 - 2021.

significantly different for Measure 1.1c.

- During CY2018 through CY2021, the non-TEFRA-like population had higher Children and Adolescents' Access to Primary Care Practitioners (CAP) rates when compared to the TEFRA-like population:

    - Child and adolescent CAP rates for the target population slightly decreased from CY2020 (89.1% for child and 94.4% for adolescent) to CY2021 (87.1% for child and 93.1% for adolescent). In the comparison population child CAP rates slightly increased from CY2020 (97.0% for child and 97.7% for adolescent) to CY2021 (97.5% for child and 97.3% for adolescent) but slightly decreased in adolescent CAP rates.

    - Comparing of age groups within target group showed 12 months - 24 years and 12 - 18 years had the highest rate at 95% of beneficiaries averaged across all years who had a visit with a PCP. The non-TEFRA-like population topped out almost at 100% (e.g., 99.5%) of 12 months - 21 months aged beneficiaries averaged across all years receiving a PCP visit.

    - Age group 25 months - 6 years had the lowest averaged PCP visit rates among all four years at 88.7% for the target group. The same age group for the comparison group demonstrated the lowest, on average across the interim measurement, PCP visit rates at 97.2%.

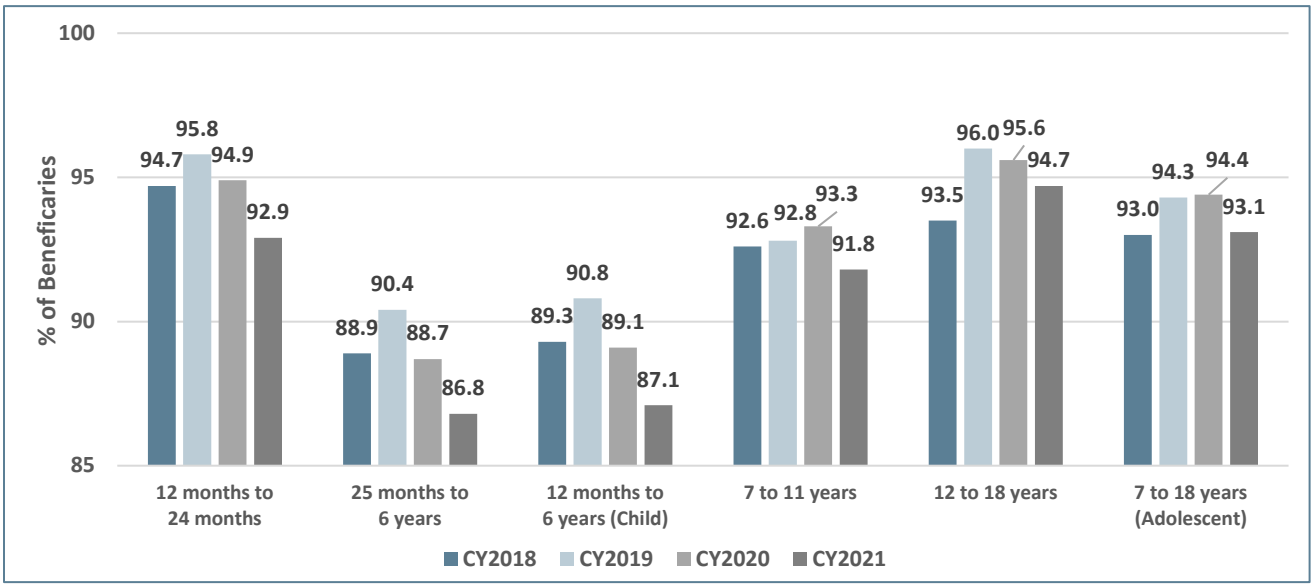
    - The Northwest region typically had lower child and adolescent access to PCP visit rates across all four years compared to other regions for the TEFRA-like population. This was also true for the child access to PCP visit rates for the non-TEFRA-like population, but the adolescent PCP visit rates showed Southeast region averaged a slightly lower rate.

For national comparisons, NCQA's State of Healthcare Quality Report provided national Medicaid HMO CAP rates for children and young adults from 12 months to 19 years of age for 2018 and 2019. CMS' Quality of Care for Children in Medicaid and CHIP 2019 Child Core Set Chart Pack[9] provided performance rates for states reporting during CY2018. In addition, for CY2018 only, the IE calculated Arkansas Medicaid CAP rates and then compared them to TEFRA-like CAP rates. During CY2018, the Arkansas Medicaid only (non-TEFRA-like) CAP rate was 94.8% for children 12 to 24 months and 88.0% for children 25 months to 6 years of age. During CY2018, the Arkansas Medicaid only (non-TEFRA-like) CAP rate for access to primary care was 90.6% for children 7 to 11 years of age and 90.0% for

adolescents 12 to 19 years of age. CAP is a retired measure and national comparisons are no longer available, starting with the CY2020 performance period.

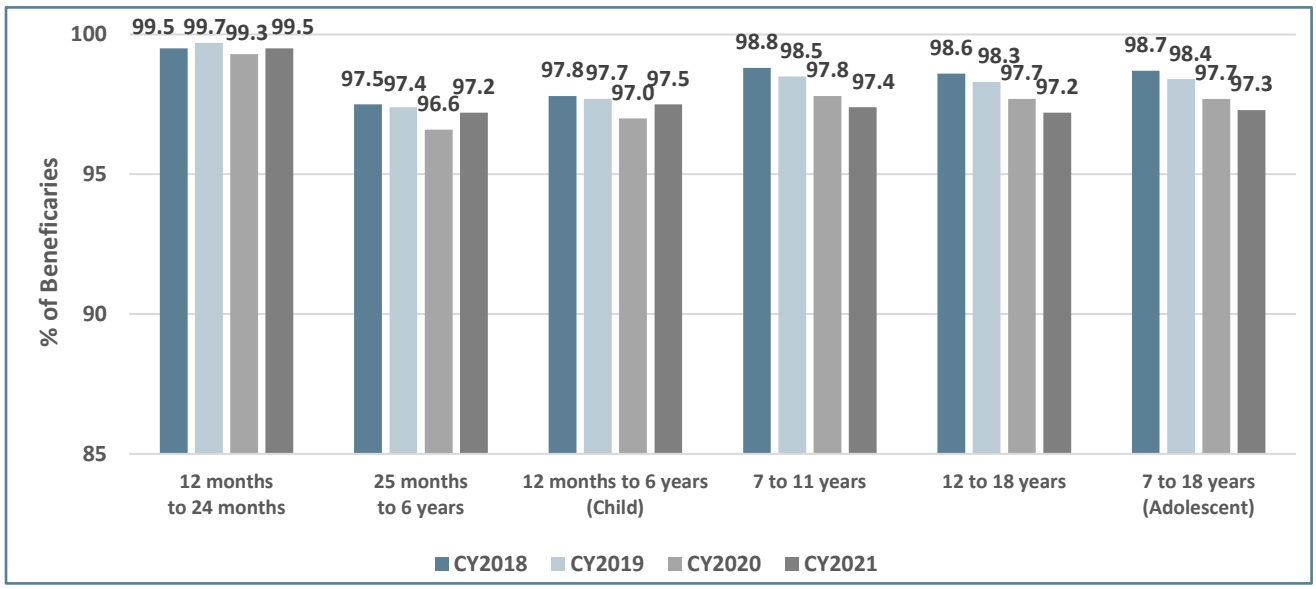
Each age group and overall age group for children 12 months to 6 years having at least one PCP visit showed an increase between CY2018 and CY2019 but a steady annual decline from CY2019 to CY2021 for the TEFRA-like population as depicted in **Figure 7**. The child age group of 25 months to 6 years showed the lowest rates in all four years compared to other TEFRA-like child and adolescent age groups. The adolescent age groups maintained 90% or higher PCP visit rate in all four years. The overall age group for adolescents 7 to 18 years had a consistent upward trend from CY2018 to CY2020 but a slight decrease in CY2021.

Figure 7: TEFRA-Like Population by Age Groups - Measure 1.1c (Children and Adolescents' Access to Primary Care Practitioners [CAP]) for CY2018 - CY2021



The non-TEFRA-like population consistently showed higher access to PCP visits compared to the TEFRA-like population in all four years across all age groups (96% or higher CAP rates). The child age groups and overall child for the non-TEFRA-like population displayed a slight decrease from CY2019 to CY2020 but an increase in CY2021. The adolescent age groups for the non-TEFRA-like population, displayed a steady annual decline from CY2018 to CY2021 as shown in **Figure 8**.

Figure 8: Non-TEFRA-Like Population by Age Groups - Measure 1.1c (Children and Adolescents' Access to Primary Care Practitioners [CAP]) for CY2018 - CY2021



Hypothesis 1.2

For **Hypothesis 1.2**, the IE continued their investigation into healthcare access by examining prescriptions. This examination of prescription coverage compared TEFRA-like and non-TEFRA-like beneficiaries. The measures were calculated to draw conclusions regarding the PDC, prescription costs, and amount of prescription filled. The PDC measures a beneficiary's medication adherence. A PDC threshold of 50% assesses beneficiaries who were dispensed at least two prescriptions on two unique dates of service and met 50% of the PDC threshold during the measurement period.

In summary, the investigation for **Hypothesis 1.2** determined Arkansas TEFRA-like beneficiaries had better access to PDC and anti-seizure medications. The number of prescriptions filled per beneficiary per month was slightly lower for the TEFRA-like population in all four years. However, the average cost per prescription was higher for the TEFRA-like population due to medical necessity requirement.

For **Question 1.2a**, the IE analyzed how TEFRA-like beneficiaries' prescriptions coverage changed over time:

- While comparing the two population from CY2018 through CY2021, the results indicate that the TEFRA-like population had a higher rate of beneficiaries with PDC at least half the time on general prescriptions when compared to the non-TEFRA-like population.

- The lowest CAP rate of PDC for all four years in the TEFRA-like-population was among age

group 0 - 4 years during CY2019 at 34.8%. For the non-TEFRA-like population, the same age group of 0 - 4 years had 24.8% during CY2018.

- The TEFRA-like population age group with the highest rate of PDC, for all four years, was age group 13 - 18 at 76.6% during CY2021. In comparison, the non-TEFRA-like population's highest rate of PDC (for all four years) was age group 9 - 12 at 62.8% during CY2021.

- The age group of adolescents 13 - 18 years had almost three-fourths of TEFRA-like beneficiaries that met PDC, at least half, of the time on general prescriptions during all four years. This was compared to the age group of children 0 - 4 years, with the lowest rates among all four years (e.g., 34.8% for CY2019).

These results indicate that the percentage of TEFRA-like beneficiaries who met the PDC threshold of 50% on general prescriptions during CY2018, CY2020, and CY2021 were significantly different (higher) than the non-TEFRA-like beneficiaries. CY2019 was the only year showing not a significant difference between target and comparison populations. Therefore, prescription coverage remained consistently higher in calendar years 2018, 2020, 2021 for TEFRA-like group, but there was a change in CY2019, where TEFRA like was more aligned with the non-TEFRA group.

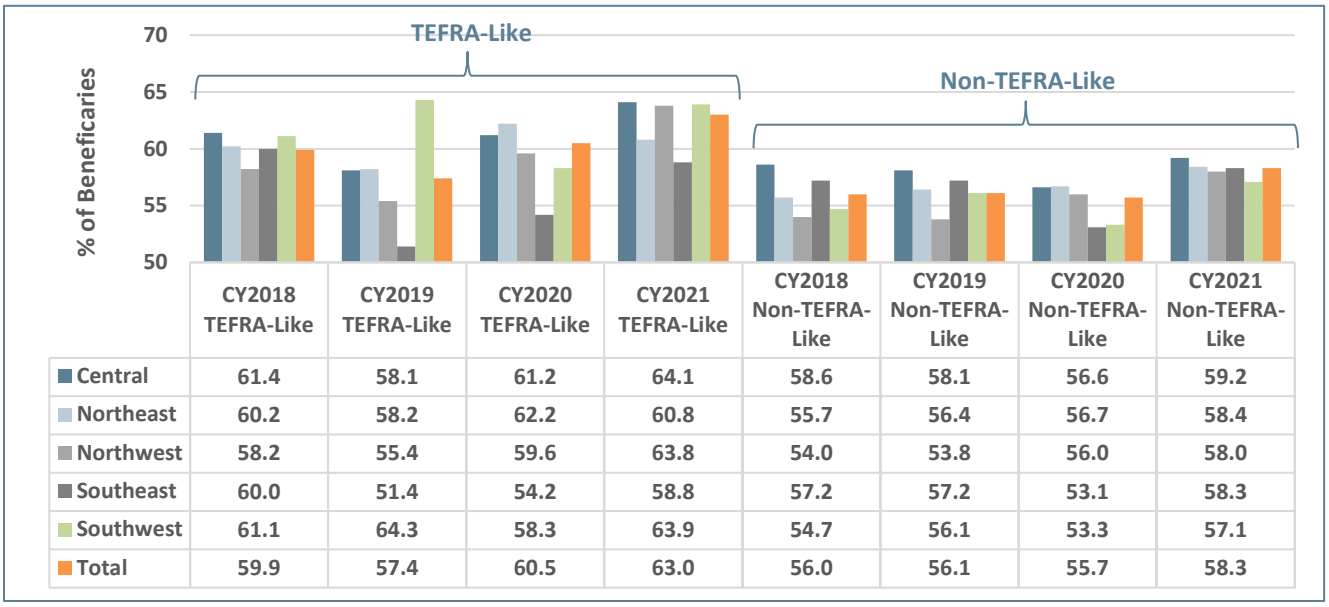
For **Question 1.2b**, the IE examined potential geographic regions of the state where TEFRA-like beneficiaries reported both low and high access to health services for at least two prescriptions (and achieved a PDC for at least 50%) as below findings:

- Between CY2018 and CY2019, all regions decreased in the rate of TEFRA-like beneficiaries who met the PDC threshold, except the Southwest region. Since CY2019 through CY2021, Central, Northwest, and Southeast regions have increased in the target population.

- All regions, except the Southwest region, decreased in the rate of TEFRA-like beneficiaries that met the PDC threshold of 50% for general prescriptions between CY2018 and CY2019, as shown in **Figure 9**. PDC threshold of 50% increased between CY2019 and CY2020 for all regions, except the Southwest region where this time rate decreased. Rates again had an increased trend between CY2020 and CY2021 for all regions, except for Northeast region showed a decrease.

- Central region trended higher PDC threshold of 50% for general prescriptions rates, approximately 60% of non-TEFRA-like beneficiaries among the five regions during CY2018 - CY2021.

Figure 9: TEFRA-Like and Non-TEFRA-Like Populations by Region - Measure 1.2a (Proportion of days covered [PDC] threshold of 50%) for CY2018 - CY2021



	CY2018 TEFRA-Like	CY2019 TEFRA-Like	CY2020 TEFRA-Like	CY2021 TEFRA-Like	CY2018 Non-TEFRA-Like	CY2019 Non-TEFRA-Like	CY2020 Non-TEFRA-Like	CY2021 Non-TEFRA-Like
Central	61.4	58.1	61.2	64.1	58.6	58.1	56.6	59.2
Northeast	60.2	58.2	62.2	60.8	55.7	56.4	56.7	58.4
Northwest	58.2	55.4	59.6	63.8	54.0	53.8	56.0	58.0
Southeast	60.0	51.4	54.2	58.8	57.2	57.2	53.1	58.3
Southwest	61.1	64.3	58.3	63.9	54.7	56.1	53.3	57.1
Total	59.9	57.4	60.5	63.0	56.0	56.1	55.7	58.3

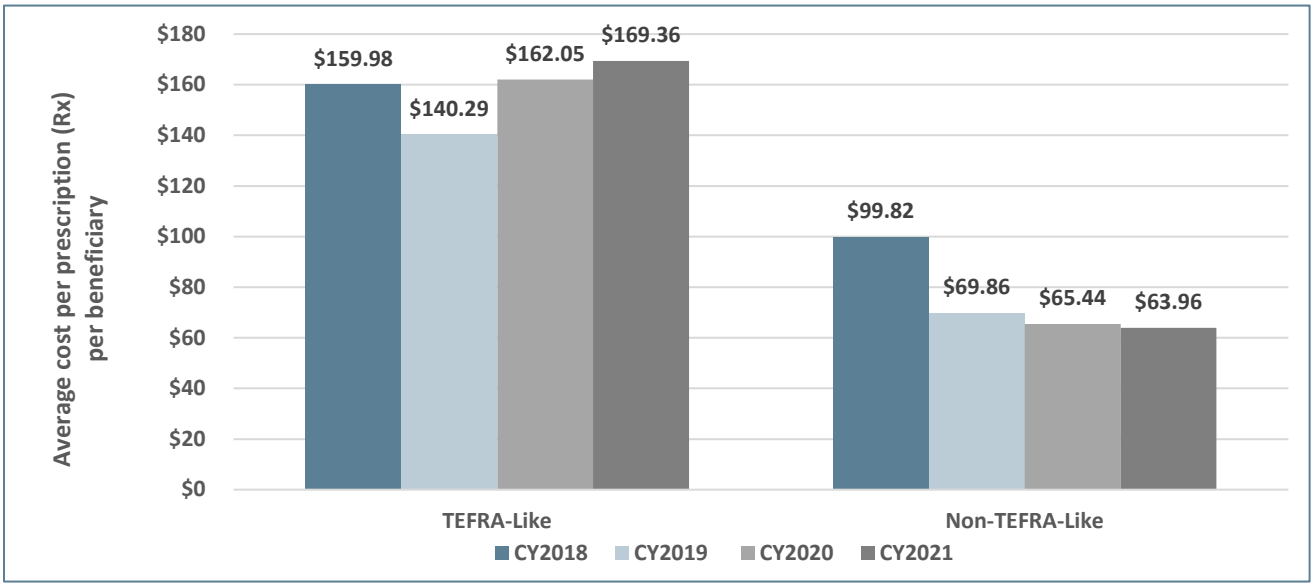
For **Question 1.2c**, the IE examined pharmacy costs to determines if TEFRA-like beneficiaries saw a change in the level of cost based on the average cost of Rx per beneficiary over time. The IE analysis shows the following:

- The average cost per Rx per beneficiary is significantly different between target and comparison populations (consistently higher in target population) during all four years.
- Across all four years, the target group had a consistently higher average cost per patient in females compared to males.
    - During CY2018 the average cost per Rx per beneficiary difference between female ($209) and male ($131) was $78 even through majority of population was male (66%). This trend within the TEFRA-like population continued for CY2019 and CY2020 between female and male with a difference increase of over $100 but CY2021 began closing the gap.
    - The average costs between the female ($212) and male ($144) TEFRA-like population in CY2021 had a decrease difference of $68. CY2021 was the first year, within the target group, where the total cost per gender reflected the higher total cost of prescriptions related to the higher count of males.

- The non-TEFRA-like population reported a different pattern, where the higher count of males on prescriptions had a higher average cost per patient.
- The Southeast region compared to other regions in the TEFRA-like population had vastly higher average cost per Rx per beneficiary in CY2018 ($269), CY2019 ($274), and CY2020 ($413) but during CY2021 Northwest region had the highest average of $228.

As shown in **Figure 10**, the TEFRA-like population had a higher average cost per Rx per beneficiary (of $160) compared to the non-TEFRA-like population of $100 in CY2018. A similar pattern in CY2019 shows a drop in the average cost per Rx per beneficiary between 2018 and 2019 in both populations. TEFRA-like beneficiaries increased average cost per Rx per beneficiary from CY2019 to CY2021. So far, the TEFRA-like population average costs per Rx per beneficiary during CY2020 had similar costs for CY2018.

Figure 10: TEFRA-Like and Non-TEFRA-Like Populations - Measure 1.2b (Average cost per prescription [Rx] per beneficiary) for CY2018 - CY2021



For **Question 1.2d**, the IE analyzed medical prescription as a measure of access to care by examining if TEFRA-like beneficiaries are receiving similar or better Rx PBPM as compared to non-TEFRA-like beneficiaries:

- The prescriptions Rx PBPM for TEFRA-like beneficiaries are significantly different (lower) when compared to non-TEFRA-like beneficiaries for CY2018 - CY2021.
- In CY2018, TEFRA-like population had a similar (i.e., slightly lower prescriptions) Rx PBPM

compared to the non-TEFRA-like population of 1.0 vs. 1.1, respectively. This difference grew between TEFRA-like population compared to the non-TEFRA-like population during CY2019 through CY2021 (e.g., 0.7 (target group) compared to 1.0 (comparison group) during CY2021). Overall, the target group demonstrated a steady decrease since CY2018 (1.0) to CY2021 (0.7).

- Consecutively, among all four years and age groups in the TEFRA-like population, age group 13 - 18 years had the highest Rx PBPM (e.g., 1.6 during CY2018 and 1.3 during CY2021) and age group 0 - 4 years had the lowest Rx PBPM (e.g., 0.5 during CY2018 and 0.4 during CY2021). A similar pattern for age groups 13 - 18 and 0 - 4 was identified in the non-TEFRA-like population in all four years and age groups.

- Southwest region repeatedly had the highest PBPM rate in all four years and regions for TEFRA-like population whereas Northwest had the lowest PBPM rate.

- The non-TEFRA-like population of the Northeast region had consecutive higher PBPM rate within all four years and regions (e.g., 1.2 during CY2018 and CY2021).

For **Question 1.2e**, the IE analyzed a specific medical prescription, anti-seizure medication, refills as a measure of access to care by examining if TEFRA-like beneficiaries are receiving similar or better Rx PBPM as compared to non-TEFRA-like beneficiaries:

- The percentage of TEFRA-like beneficiaries taking at least two anti-seizure medications was significantly different (higher) when compared to non-TEFRA-like beneficiaries for CY2018 - CY2021.

- The TEFRA-like population had a higher rate of beneficiaries prescribed at least two anti-seizure medications compared to non-TEFRA-like population in all four years (e.g., 6.7% vs. 5.7% during CY2021). As seen in **Figure 11**, the target group reflects a decrease trend from baseline to current measurement period and where the comparison group is closing the gap for Measure 1.2e.

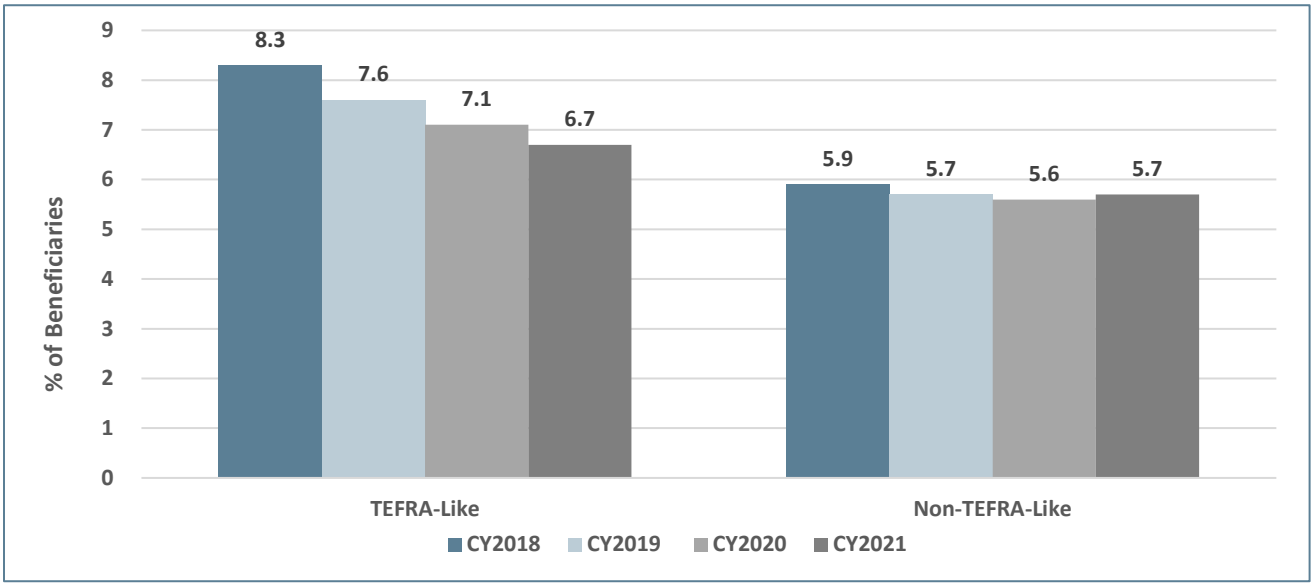
- Age group 13 - 18 trended the highest anti-seizure medication rate among the four years and age groups within both the TEFRA-like and non-TEFRA-like population. During CY2018, for age group 13 - 18, the contrast between target (16.4%) and comparison (8.6%) was almost doubled. This same comparison during CY2021 was less of a difference where target group had 13.2% and comparison group had 8.0%.

- The TEFRA-like female population consistently had a higher percentage of anti-seizure

medications prescribed in all four years compared to the TEFRA-like male population (e.g., 10.2% vs. 7.3% during CY2018 and 8.5% vs. 5.7% during CY2021). The opposite occurred for the non-TEFRA-like population, where males had a slightly higher anti-seizure medication rate compared to females in all four years, for example within CY2021 reported 5.6% (female) and 5.8% (male).

- The Southwest region had the highest percentage of beneficiaries prescribed at least two anti-seizure medications during CY2018 through CY2021 among both population sets.

Figure 11: TEFRA-Like and Non-TEFRA-Like Populations - Measure 1.2d (Anti-Seizure) CY2018 - CY2021



Hypothesis 2.1

For **Hypothesis 2.1**, the IE compared Arkansas TEFRA-like beneficiaries during CY2018 through CY2021 to determine if preventive care services perform similarly or better over time for newly enrolled beneficiaries of the Arkansas TEFRA-like demonstration. In summary for **Hypothesis 2.1**, newly enrolled Arkansas TEFRA-like beneficiaries performed more poorly or similar on preventative care services, such as first health care visit to PCP or therapy service within 60 days of enrollment, between baseline and interim measurement periods.

For **Question 2.1a**, the IE addressed how soon after enrollment the newly enrolled TEFRA-like beneficiaries received access to a first health care PCP visit:

- Measure 2.1a, as depicted in **Table 3** and significance testing comparisons, reported

decrease trending from CY2019 through CY2021.

- Between CY2018 (31.7%) and CY2019 (36.7%), there was a 16% relative improvement rate among newly enrolled TEFRA-like beneficiaries who received their first health care visit to a PCP within 60 days of enrollment. During CY2020 (31.7%) the rate dropped in alignment with the baseline period, but drastically dropped in CY2021 (22.5%).

- Overall, rates decreased in all demographics between CY2019 and CY2020 then again between CY2020 and CY2021.

- Among the sub-groups, the age group 13 -18 who received first health care visit to PCP within 60 days of enrollment had the sharpest decline between CY2020 (36.3%) to CY2021 (22.7%).

- The Northeast region had a 35% relative improvement between CY2018 and CY2019 but had a 32% relative decrease between CY2019 and CY2020 and continued decrease in CY2021. The Northwest region had the lowest rate of first health care visit to PCP within 60 days of enrollment during all four years (e.g., 24.1% in CY2018 and 17.9% in CY2021).

Table 3: TEFRA-Like Population - Measure 2.1a (First health care visit to PCP w/in 60 days) and Measure 2.1b (First health care visit for therapy services w/in 60 days) for CY2018 - CY2021

Measure	% of TEFRA-Like Beneficiaries				Statistically Significance Testing (p < 0.05)
	CY2018	CY2019	CY2020	CY2021	Comparisons
Measure 2.1a - First health care visit to PCP w/in 60 days	31.7%	36.7%	31.4%	22.5%	Not significantly different between CY2019 vs. CY2018, CY2020 vs. CY2018; Significantly different between CY2021 vs. CY2018, CY2021 vs. CY2020
Measure 2.1b - First health care visit for therapy services w/in 60 days	43.9%	38.7%	34.6%	35.1%	Not significantly different between CY2019 vs. CY2018, CY2021 vs. CY2020; Significantly different between CY2020 vs. CY2018, CY2021 vs. CY2018

For **Question 2.1b**, the IE lists what rate of newly enrolled TEFRA-like beneficiaries received speech, occupational, and physical therapies within a certain number of days from enrollment.

- Overall, Measure 2.1b demonstrated a trending decrease from baseline (CY2018) through interim results (see **Table 3**). Over 43% of newly enrolled TEFRA-like beneficiaries received their first health care visit to speech, occupational, or physical therapy services within 60 days of enrollment during CY2018. This rate dropped to 38.7% during CY2019 and continued to drop in the last two years (32.2% during CY2021).

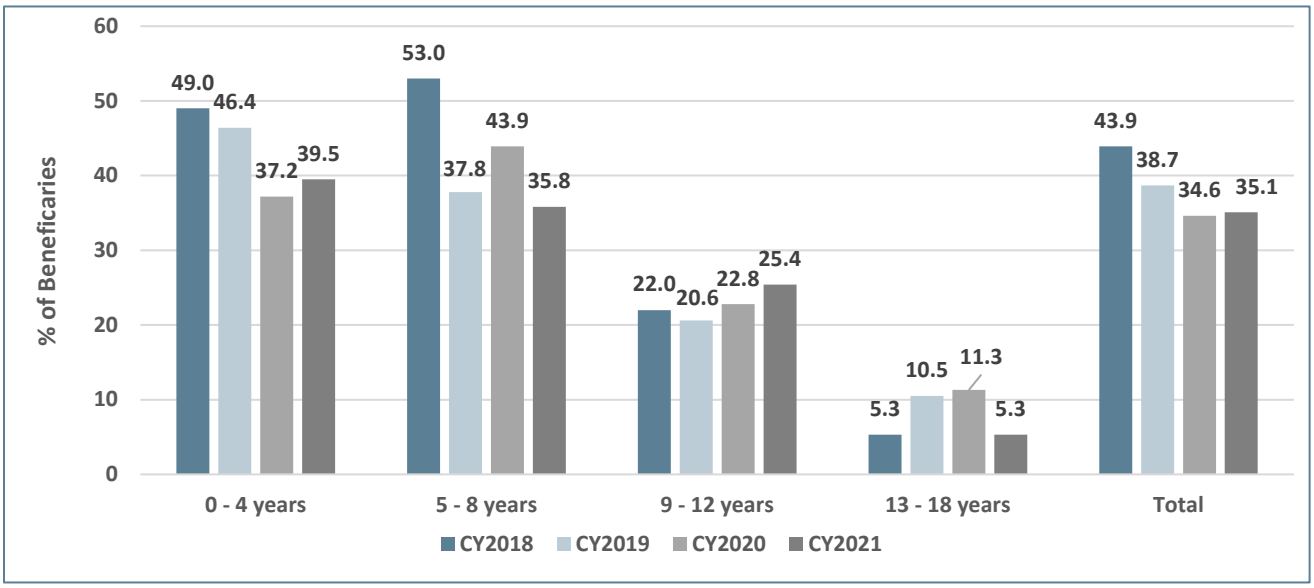
- Males outperformed females in all four years. CY2019 reported the largest gap between males and females of 7.3 percentage points (i.e., male rate of 41.1% vs. female rate of 33.8%).

- Southwest region was the only region who displayed improvement between CY2018 vs. CY2019 and CY2020 (i.e., 23.5% during CY2018 vs. 31.6% during CY2019 and 45.9% during CY2020) but a substantial drop in CY2021 of 16.7% (due to low volume in the numerator).

- A considerable drop in the Southeast region rate of newly enrolled TEFRA-like beneficiaries receiving their first health care visit to speech, occupational, or physical therapy services within 60 days of enrollment existed between CY2018 vs. CY2019 and CY2020 (i.e., 36.4% during CY2018 vs. 20.8% during CY2019 and 14.8% during CY2020) which is impacted by small numerator values. Therapy service results were impacted during CY2020 due to the COVID-19 pandemic since these services could have been provided in school settings. Therefore, place of service code for telehealth along with corresponding therapy visit codes were included starting with CY2020 results.

As depicted in **Figure 12**, children of 0 - 4 and 5 - 8 years of age had almost half or more of eligible population receiving their first health care visit to speech, occupational, or physical therapy services within 60 days of TEFRA-like enrollment during CY2018. Unfortunately, the age group 5 - 8 reported an almost 30% relative decrease between CY2019 (37.8%) and CY2018 (53.0%) but rate increased during CY2020 (43.9%) and drop again in CY2021 (35.8%). However, the age group 9 -12 showed the only improvement between CY2018 of 22.0% to 25.4% in CY2021 of newly enrolled TEFRA-like beneficiaries who received first health care visit for at least one therapy services within 60 days of enrollment.

Figure 12: TEFRA-Like Population by Age Groups and Total - Measure 2.1b (First health care visit for therapy services w/in 60 days) for CY2018 - CY2021



For **Question 2.1c.**, the IE reviewed the average length (in months) of TEFRA-like segments:

- Overall, the TEFRA-like beneficiaries' average length of segments (in months) displayed an improved trend from baseline through interim years (e.g., CY2018 at 9.8 and CY2021 at 10.9) of significant improvement.

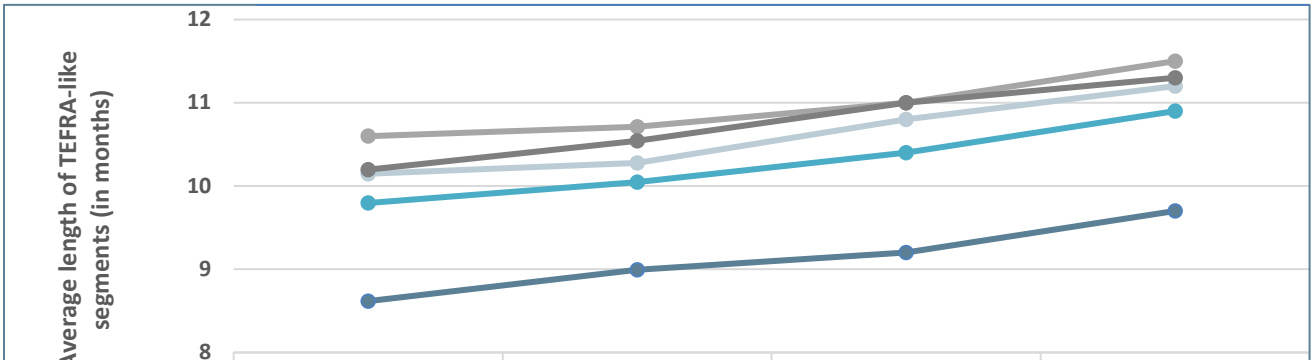
- During CY2018 through CY2020, the TEFRA-like population had an overall average length (in months) enrolled in the program of 10 out of the 12-month measurement period. Then, in CY2021 the average length increased to 11 (10.9) out of 12 months.

- During CY2018 through CY2021, the 9 - 12 age group consistently trended the highest or equal average retention length (in months) among the four age groups of 11 months or higher out of 12 of enrolled TEFRA-like segments (e.g., 10.6 in CY2018 and 11.5 in CY2021) (see **Figure 13**). In comparison to 0 – 4 years, this age group trended the lowest average retention in months for all four years, which could be due to younger age group first enrolling into the TEFRA-like program.

- Males and females reported very similar results among all four years (i.e., little to no difference).

- The Southwest region showed the highest retention among the five regions during CY2021 at 11.1 with over a month and half increase since CY2018. Inclusive for Measure 2.1c, all sub-groups had an increasing trend from CY2018 through CY2021.

Figure 13: TEFRA-Like Population by Age Groups and Total - Measure 2.1c (Average length of TEFRA-like segments) for CY2018 - CY2021



	CY2018	CY2019	CY2020	CY2021
0 - 4 years	8.6	9.0	9.2	9.7
5 - 8 years	10.1	10.3	10.8	11.2
9 - 12 years	10.6	10.7	11.0	11.5
13 - 18 years	10.2	10.5	11.0	11.3
Total	9.8	10.0	10.4	10.9

Hypothesis 2.2

For **Hypothesis 2.2**, the IE assessed if the Arkansas TEFRA-like beneficiaries have equal or higher rates of TPL coverage for appropriate preventive care in comparison to the Medicaid FFS population (Medicaid non-TEFRA-like). A child may have both Arkansas Medicaid TEFRA-like coverage and other health insurance. The other insurance is billed first and then Arkansas Medicaid provides coverage for medically necessary services that other health insurance may not cover. During the TEFRA-like enrollment process TPL medical insurance coverage is captured. To assess appropriate preventive care, the volume of TPL coverage was reviewed by the percentage of TEFRA-like beneficiaries over time.

In summary for **Hypothesis 2.2**, Arkansas TEFRA-like beneficiaries had lower rates, but not significantly different, TPL coverage for appropriate preventative care compared to rates for non-TEFRA-like beneficiaries in the adolescent age group 7 to 18 years and child age group 12 months to 6 years. Therefore, there was equal or lower TPL coverage between groups. The TEFRA-like population had significantly higher TPL coverage rates compared to non-TEFRA-like population across the interim period.

For **Question 2.2a**, the IE explored the rates of TPL coverage between the TEFRA-like and non-

TEFRA-like beneficiaries to determine if the target group had equal or higher rates than the comparison group:

- During CY2018 through CY2021, on average 72.6% of the TEFRA-like population had at least one Medicaid claim paid by TPL coverage (non-Medicaid).
- Baseline CY2018 reported the lowest rate of 69.7% and CY2019 reported the highest rate of 74.3% within the target population.
- The TEFRA-like population was vastly different compared to the Medicaid non-TEFRA-like population results (e.g., TEFRA-like CY2018 rate of 69.7% vs. non-TEFRA-like CY2018 rate of 8.6% and TEFRA-like CY2021 rate of 72.5% vs. non-TEFRA-like CY2021 rate of 6.9%).
- A substantial decrease in the number of non-TEFRA-like claims likely contributed to the lower non-TEFRA-like results reported in CY2018 and CY2021.
- On average, among the four years, three out of four TEFRA-like beneficiaries ages 9 - 12 had at least one Medicaid claim paid by TPL coverage. In comparison the non-TEFRA-like beneficiaries only averaged 15% of the age group 9 - 12 reported at least one Medicaid claim paid by TPL coverage.
- The Northwest region had highest percentages of TPL coverage in all four years in the target population. TEFRA-like beneficiaries in the Northwest region receiving TPL coverage with at least one Medicaid claim during CY2018 was 72.1% then increased to 77.5% in CY2019, slightly decreased in CY2020 to 76.6%, and decreased again in CY2021 to 74.7%.
- In the Southeast region, a median of 16% of the non-TEFRA-like population reported having at least one Medicaid claim. At the county level for Measure 2.2a, Clay County within the Northeast part of Arkansas showed the highest median rate (86.6%) among all four years within target population, where denominator was greater than 10 beneficiaries. Moving to the Southwest part of the state, Dallas County reported the highest median rate (26.5%) among all four years within comparison population, where denominator was greater than 10 beneficiaries.

For **Question 2.2b**, the IE explored if beneficiaries are receiving preventive care with a PCP visit since the majority of TEFRA-like beneficiaries do have TPL coverage:

- TPL coverage: Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020, and CY2021

- The TEFRA-like population who had at least one Medicaid claim paid by TPL coverage (non-Medicaid) had lower rates of beneficiaries with one or more visits with a PCP compared to non-TEFRA-like population for overall children and adolescents during CY2018 through CY2021 (e.g., TEFRA-like CY2018 rate of 92.5% vs. non-TEFRA-like CY2018 rate of 95.7% and TEFRA-like CY2021 rate of 92.5% vs. non-TEFRA-like CY2021 rate of 95.3%).

- Out of the four age groups, 12 months - 24 months had the highest rates for all four years within the target and comparison populations for Measure 2.2b (during CY2021 target rate of 96.0% vs. comparison rate of 99.2%).

- Females slightly outperformed males on average for children and adolescents when compared within each population across all years.

- The TEFRA-like children with TPL coverage with one or more visits with a PCP in the Northeast region reported the highest average rate for all four years at 95.0% compared to the non-TEFRA-like children in the Northeast region at 96.1%.

- Adolescent regional breakouts for Measure 2.2b, reported Southeast TEFRA-like beneficiaries' average rate for all four years of 98.4% (highest average for target population) compared to the non-TEFRA-like Southeast region of 96.5%.

- The Northwest region in both populations displayed the lowest average rates for adolescents with TPL coverage with one or more visits with a PCP (i.e., target rate of 91.5% vs. comparison rate of 96.2%)

For **Question 2.2c**, the IE investigated what geographic regions of the state had high and low percentages of TPL coverage:

- In all four years, there was a significant difference between the TEFRA-like and non-TEFRA-like beneficiaries with TPL coverage. Over 60% of TEFRA-like beneficiaries had TPL coverage across all years and geographic regions compared to less than 26% in the non-TEFRA-like population.

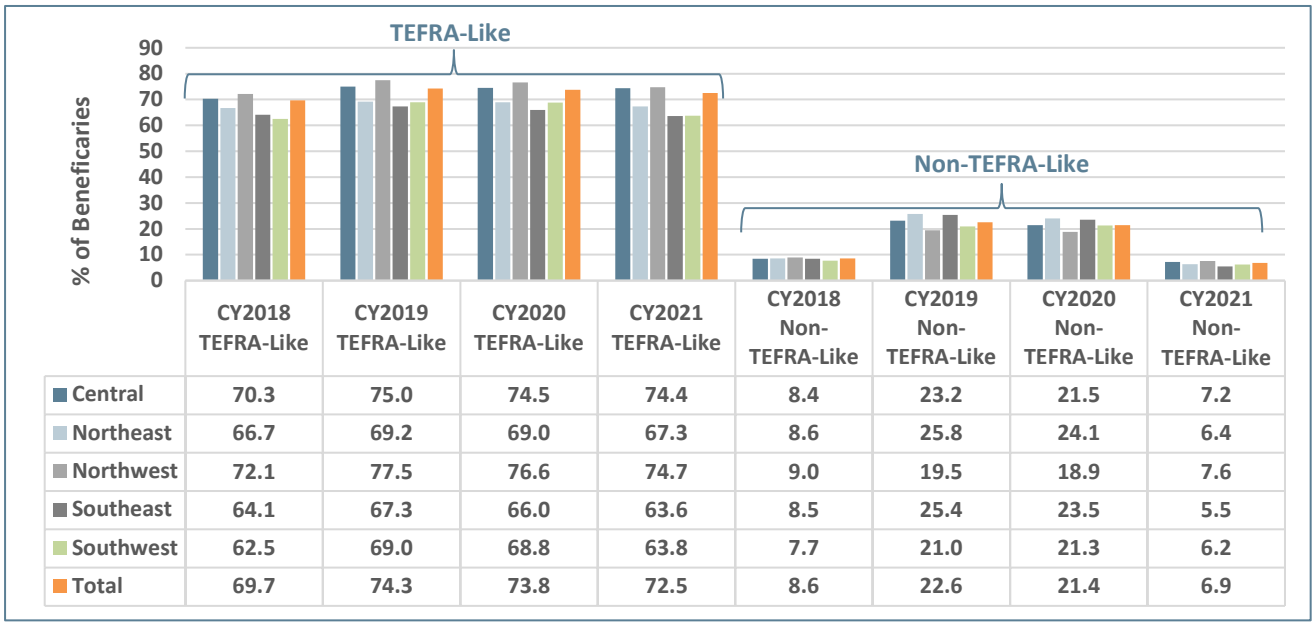
- The Northwest region of TEFRA-like beneficiaries, on average, had the highest percentage (75%) of beneficiaries with at least one TPL claim paid by Medicaid.

- The lowest average percentage (65% across all reporting years) of TEFRA-like beneficiaries who had at least one TPL claim occurred in the Southeast region.

- The highest percentage of non-TEFRA-like beneficiaries with TPL coverage were in the Northeast region, while the lowest percentage occurred in the Southwest region of the state.

As revealed in **Figure 14**, the Central and Northwest regions were at or above 70% of TEFRA-like beneficiaries with TPL coverage on at least one Medicaid claim across the interim evaluation period of CY2018 through CY2021. The highest percentage of non-TEFRA-like TPL coverage occurred in CY2019 and CY2020 spiking at 25.8% in the Northeast region in CY2019.

Figure 14: TEFRA-Like and Non-TEFRA-Like Populations by Region - Measure 2.2a (Third Party Liability [TPL] coverage) for CY2018 - CY2021



	CY2018 TEFRA-Like	CY2019 TEFRA-Like	CY2020 TEFRA-Like	CY2021 TEFRA-Like	CY2018 Non-TEFRA-Like	CY2019 Non-TEFRA-Like	CY2020 Non-TEFRA-Like	CY2021 Non-TEFRA-Like
Central	70.3	75.0	74.5	74.4	8.4	23.2	21.5	7.2
Northeast	66.7	69.2	69.0	67.3	8.6	25.8	24.1	6.4
Northwest	72.1	77.5	76.6	74.7	9.0	19.5	18.9	7.6
Southeast	64.1	67.3	66.0	63.6	8.5	25.4	23.5	5.5
Southwest	62.5	69.0	68.8	63.8	7.7	21.0	21.3	6.2
Total	69.7	74.3	73.8	72.5	8.6	22.6	21.4	6.9

Hypothesis 2.3

For **Hypothesis 2.3**, the IE examined DME coverage to determine if Arkansas TEFRA-like beneficiaries have equal or higher rates of DME coverage for appropriate preventive care when compared to the Medicaid FFS population (Medicaid Non-TEFRA-like).

In summary for **Hypothesis 2.3**, DME coverage for the Arkansas TEFRA-like population had higher rates for appropriate preventive care when compared to Medicaid Non-TEFRA-like population (in all four years of CY2018 - CY2021).

For **Question 2.3a**, the IE inquired if TEFRA-like beneficiaries had equal or higher rates of durable medical equipment (DME) coverage. Measure 2.3a demonstrated a steady decline in both populations over the four years who had at least one DME claim.

- There was a significant difference in DME coverage between the TEFRA-like and non-TEFRA-like populations across years; however, the percentage difference has shown a slight decline from 27.5% in CY2018 to 21.2% in CY2021.

- Within the TEFRA-like population age groups who had at least one DME claim, the 0 - 4 age group had the highest utilization rates among all four years, for example 47.0% during CY2018 and 37.8% during CY2021. The non-TEFRA-like population also reported 0 - 4 age group having the highest utilization rates among all four years but lower percentages compare to target population, for example 28.8% during CY2018 and 28.0% during CY2021.

- Age group 13 - 18 reported the lowest utilization rates among all four years and within each population. The TEFRA-like population had three times the percentage of beneficiaries who had at least one DME coverage claim compared to the non-TEFRA-like population during all four years.

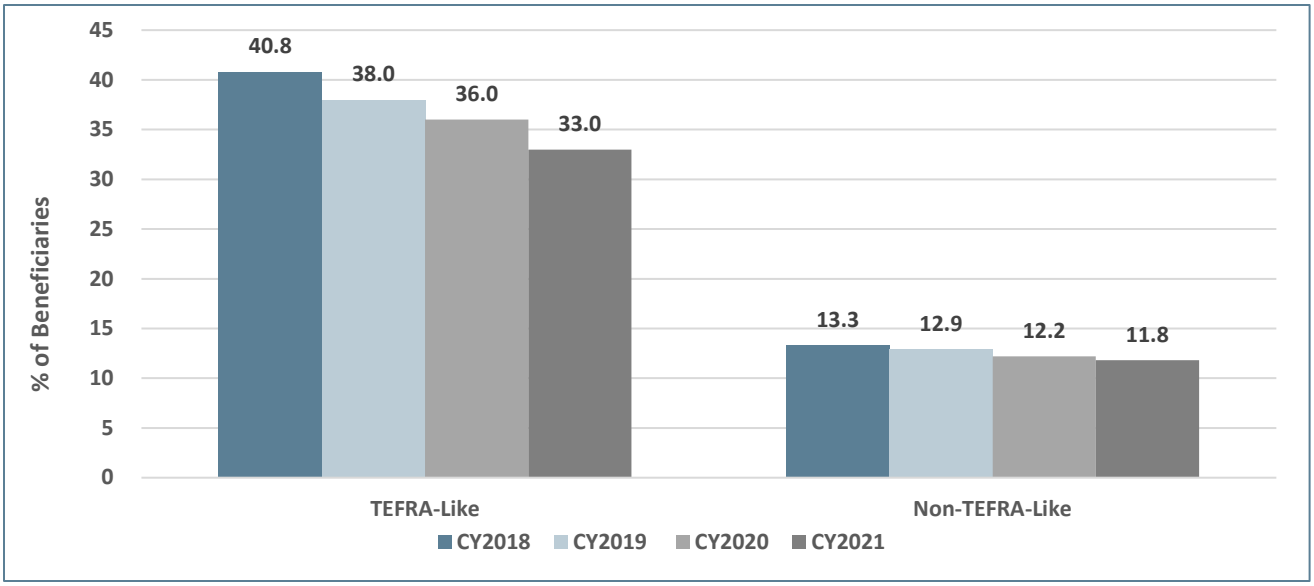
- Females (39.7%) had a higher average rate of DME claim coverage compared to males (35.5%) in the target population but the comparison population, the males (13.8%) had a slightly higher utilization average rate to females (11.0%).

- Southeast region reported the highest average rate for all four years at 38.8% compared to the non-TEFRA-like children in the Southeast region at 9.5% (lowest average rate for all four years).

- The top three primary diagnosis conditions based off highest volume of claims during CY2018 through CY2021 in the TEFRA-like and Medicaid non-TEFRA-like populations were in Genitourinary Symptoms, Nutrition Endocrine and Metabolic Disorders, and Other GI Disorders.

Figure 15 displays the TEFRA-like population baseline rate of CY2018 was 40.8% and interim rate of CY2021 was 33.0%. In comparison, the non-TEFRA-like population baseline rate of CY2018 was 13.3% and interim rate of CY2021 was 11.8%.

Figure 15: TEFRA-Like and Non-TEFRA-Like Populations - Measure 2.3a (Durable Medically Equipment [DME] coverage) for CY2018 - CY2021



For **Question 2.3b**, the top five primary diagnosis conditions/codes and condition types for TEFRA-like beneficiaries were determined. Also, based on the number of DME claims, the beneficiaries that have DME coverage are presented in **Table 4**. This table includes only the common top three out of the top five primary diagnosis conditions in both populations.

Table 4: TEFRA-Like and Non-TEFRA-Like Populations - Measure 2.3a (Durable Medically Equipment [DME] coverage): Common Three out of Top Five Primary Diagnosis Conditions for CY2018 - CY2021

Common Three Out of Top Five Primary Diagnosis Conditions for TEFRA-Like Beneficiaries	TEFRA-Like: Number of DME Claims (Number of Beneficiaries)				Non-TEFRA-Like: Number of DME Claims (Number of Beneficiaries)			
	CY2018	CY2019	CY2020	CY2021	CY2018	CY2019	CY2020	CY2021
Genitourinary Symptoms	5,584 (648)	5,332 (612)	4,948 (562)	4,951 (537)	25,510 (2,801)	24,941 (2,892)	24,019 (2,652)	24,547 (2,669)
Nutrition Endocrine and Metabolic Disorders	2,211 (381)	1,935 (366)	2,176 (379)	2,233 (378)	25,095 (2,597)	23,598 (2,737)	21,481 (2,569)	18,985 (2,511)
Other GI Disorders	1,514 (220)	1,414 (220)	1,365 (200)	1,310 (195)	7,584 (823)	7,220 (875)	6,055 (811)	6,362 (832)

Hypothesis 3.1

For **Hypothesis 3.1**, the IE evaluated the beneficiary's experience regarding quality of care and access to health care services received in the Arkansas TEFRA-like demonstration. It was determined beneficiary experience has remained the same or improved over time. In summary for **Hypothesis 3.1**, when compared to ARKids First A or ARKids First B beneficiary experience, Arkansas TEFRA-like beneficiary experience regarding quality of care and access to health care services has remained the same or improved over time (i.e., no significant difference).

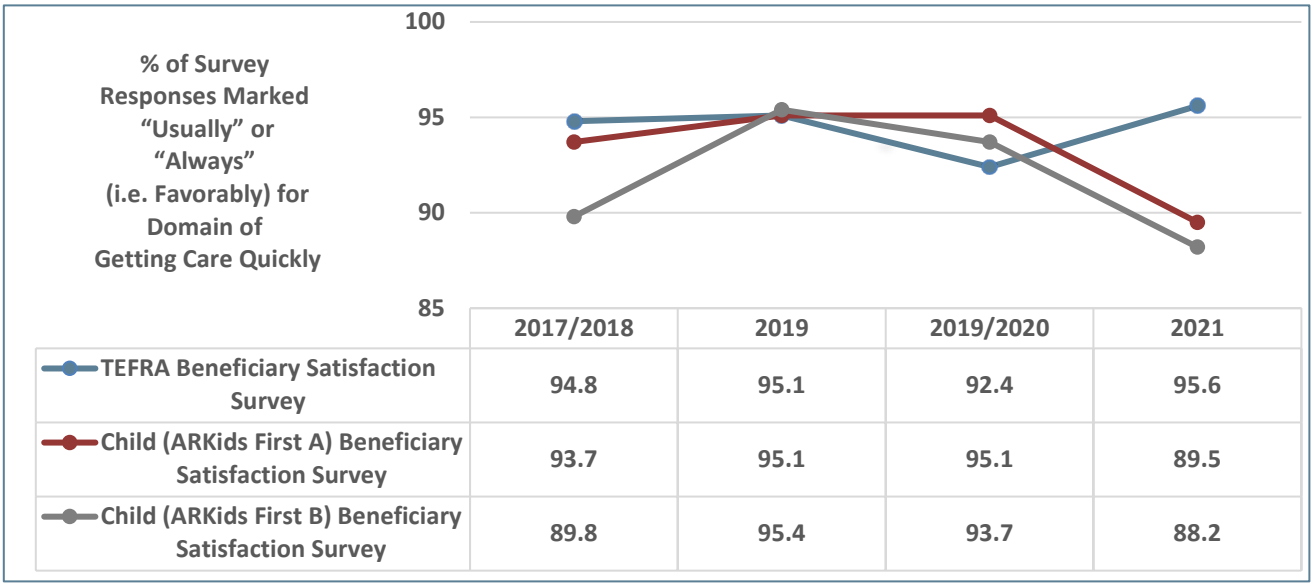
For **Question 3.1a**, the IE addressed if TEFRA-like beneficiaries' experience scores regarding getting care quickly improved or stayed the same over time:

- The TEFRA Beneficiary Satisfaction Survey total composite scores for "Getting care quickly" displayed no significant difference between 2019 vs. 2018 scores and then again between 2020 vs. 2019. TEFRA-like beneficiaries' experience scores of getting care quickly had an increase in 2021 score (highest score among all four years) when compared to 2020 score (i.e., 2021 at 95.6% was significantly higher than 2020 at 92.4%) (see **Figure 16**).

- The 2018 TEFRA "Getting care quickly" score (94.8%) were slightly higher when compared to 2017 ARKids First A (93.7%) and 2018 ARKids First B (89.8%) Beneficiary Satisfaction Survey composite scores. The 2019 TEFRA "Getting care quickly" scores were very similar to 2019 ARKids First A and B Beneficiary Satisfaction Survey composite scores (all three scores approx. 95%). The 2020 ARKids First B Beneficiary Satisfaction Survey composite score (93.7%) was slightly higher than the 2021 ARKids First A (89.5%) and 2020 TEFRA (92.4%) Beneficiary Satisfaction Survey composite scores.

- Survey results of 2021 TEFRA-like beneficiaries' experience of getting care quickly had a much higher score of respondents selecting “usually” or “always” compared 2021 ARKids First B population (i.e., 95.6% in target group vs. 88.2% in ARKids First B group).

Figure 16: Measure 3.1a (Survey-based getting care quickly) for 2017/2018 - 2021



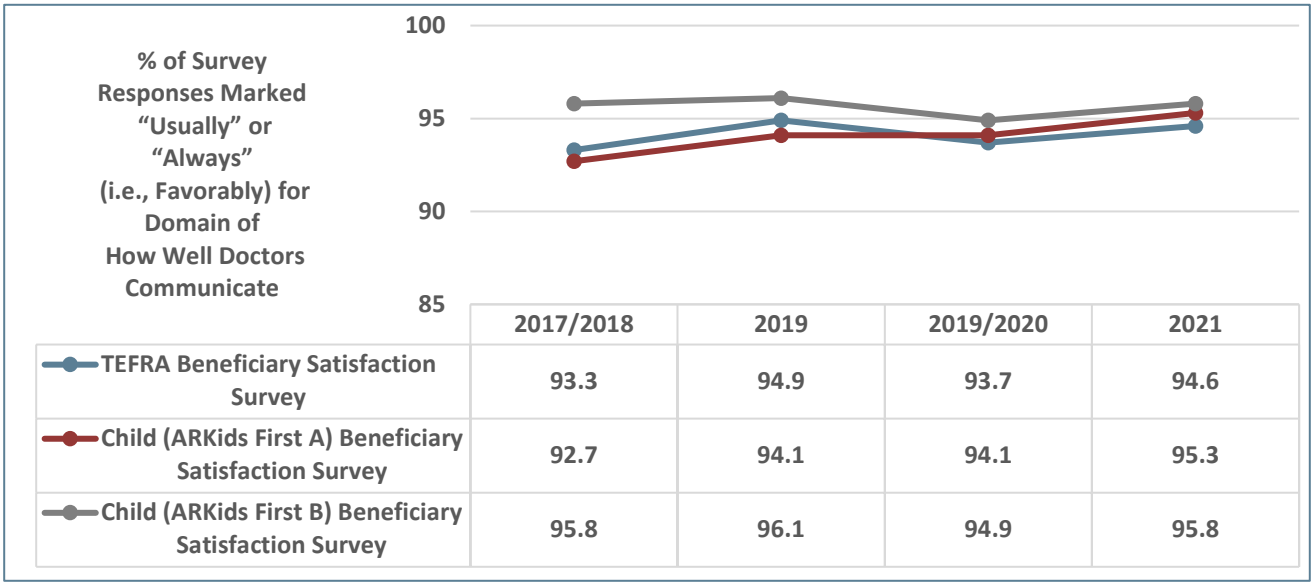
	2017/2018	2019	2019/2020	2021
TEFRA Beneficiary Satisfaction Survey	94.8	95.1	92.4	95.6
Child (ARKids First A) Beneficiary Satisfaction Survey	93.7	95.1	95.1	89.5
Child (ARKids First B) Beneficiary Satisfaction Survey	89.8	95.4	93.7	88.2

For **Question 3.1b**, the IE reported if TEFRA-like beneficiaries' have confidence in how well doctors communicate:

- There is no significant difference based on survey responses for "How well doctors communicate" between TEFRA and ARKids First A and ARKids First B populations.
- The favorable responses on "How well doctors communicate" from 2020 TEFRA (93.7%) survey respondents had a lower composite score when compared to 2021 ARKids First A (95.3%) and 2020 ARKids First B (94.9%) Beneficiary Satisfaction Survey composite scores.
- The same occurrence existed during 2021, where the ARKids First B achieved a higher composite score of 95.8% compared to the 2021 TEFRA composite score of 94.6% on how well doctors communicate.

Figure 17 illustrates the ARKids First B has a 2% higher response average of "Usually" or "Always" for the domain of "How well Doctors Communicate" compared to TEFRA and ARKids First A with an average of 94%. Both TEFRA and ARKids First B has a slight spike in the response in CY2019, where ARKids First A displayed a spike in response in CY2021.

Figure 17: Measure 3.1b (Survey-based how well doctors communicate) for 2017/2018 - 2021



	2017/2018	2019	2019/2020	2021
TEFRA Beneficiary Satisfaction Survey	93.3	94.9	93.7	94.6
Child (ARKids First A) Beneficiary Satisfaction Survey	92.7	94.1	94.1	95.3
Child (ARKids First B) Beneficiary Satisfaction Survey	95.8	96.1	94.9	95.8

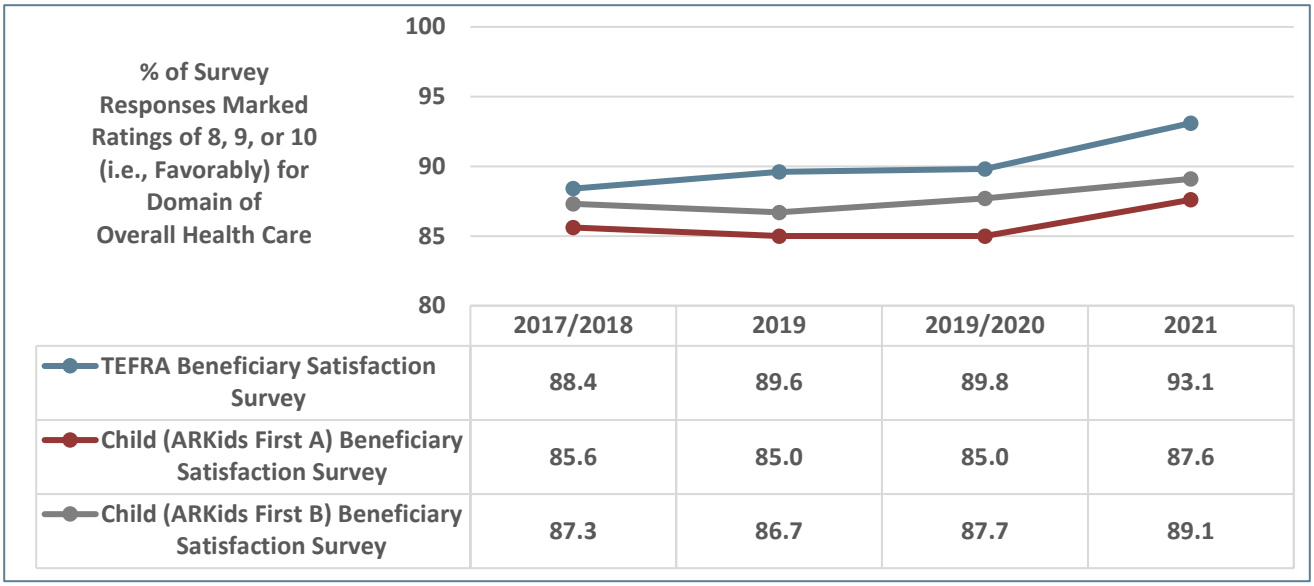
For **Question 3.1c**, the IE determined that the overall health care rating showed improvement over time:

- In comparison between TEFRA, ARKids First A, and ARKids First B, no significant difference was observed in survey responses for overall health care ratings. The TEFRA responses for ratings of "8, 9, or 10" on average across the four years were 2% higher than ARKids First B, and 4% higher than ARKids First A.

- For each survey year comparison, as shown in **Figure 18**, the TEFRA Beneficiary Satisfaction Survey of respondents marking favorably ratings of 8, 9, or 10 for overall health care outperformed the ARKids First A and ARKids First B populations (e.g., 2021 TEFRA score of 93.1% compared to 2021 ARKids First B score of 89.1%).

- From 2018 baseline through 2021 interim, the TEFRA survey scores trended a consistent increase for beneficiary's favorable experience regarding overall health care.

Figure 18: Measure 3.1c (Survey-based overall health care) for 2017/2018 - 2021



	2017/2018	2019	2019/2020	2021
TEFRA Beneficiary Satisfaction Survey	88.4	89.6	89.8	93.1
Child (ARKids First A) Beneficiary Satisfaction Survey	85.6	85.0	85.0	87.6
Child (ARKids First B) Beneficiary Satisfaction Survey	87.3	86.7	87.7	89.1

Hypothesis 3.2

For **Hypothesis 3.2**, the IE reviewed if patient experience with access to health care services improve with enrollment into the TEFRA-like program. In summary for **Hypothesis 3.2**, the results show significantly better access to care post-TEFRA enrollment than in the six-month period prior to the beneficiary's enrollment in the TEFRA-like program. The access to care elements evaluated by the survey included: beneficiary's experience regarding access to health care services in personal doctor or nurse, prescriptions, and urgent care improve with enrollment into the Arkansas TEFRA-like program.

For **Question 3.2a**, the IE identified if TEFRA-like beneficiaries experience better access to health care when seeing a personal doctor or nurse:

- In comparing health care six months before and since enrolling in TEFRA, the 2018 through 2021 survey scores reported fewer problems seeing a personal doctor or nurse (see **Figure 19** and **20**).
- Among the four survey years, earliest to latest, pre-TEFRA reported scores of 23.4%, 24.7%, 23.0%, and 23.4%, while post-TEFRA reported scores of 5.6%, 7.2%, 6.0%, and 6.5%.
- Each survey year's absolute percentage difference between pre-TEFRA and post-TEFRA results on respondents marking a big or small problem seeing a personal doctor or nurse was at least 17%.

- The 2018 survey displayed the highest absolute percentage difference of 17.8% and 2021 survey displayed the lowest absolute percentage difference of 16.9% between pre-TEFRA and post-TEFRA.

For **Question 3.2b**, the IE reported if TEFRA-like beneficiaries experience better pharmacy access for prescription medications with enrollment into TEFRA-like program:

- In comparing health care six months before and since enrolling in TEFRA, the 2018 through 2021 survey scores reported fewer problems getting prescription medication (see **Figure 19** and **20**).

- Among the four survey years, earliest to latest, pre-TEFRA reported scores of 29.0%, 32.1%, 30.4%, and 31.2%, while post-TEFRA reported scores of 16.1%, 15.5%, 12.1%, and 11.5%.

- Each survey year's absolute percentage difference between pre-TEFRA and post-TEFRA results on respondents marking a big or small problem getting prescription medication was from the minimum difference of 12.9% to maximum difference of 19.7%.

- The 2018 survey displayed the lowest absolute percentage difference and 2021 survey displayed the highest absolute percentage difference between pre-TEFRA and post-TEFRA.

For **Question 3.2c**, the IE determined if beneficiaries experience problems when needing urgent care access with enrollment into TEFRA-like program:

- In comparing health care six months before and since enrolling in TEFRA, the 2018 through 2021 survey scores reported fewer problems getting urgent care (see **Figure 19** and **20**).

- Among the four survey years, earliest to latest, pre-TEFRA reported scores of 25.0%, 23.1% (2019 through 2021), while post-TEFRA reported scores of 5.3%, 7.6%, 5.1%, and 5.8%.

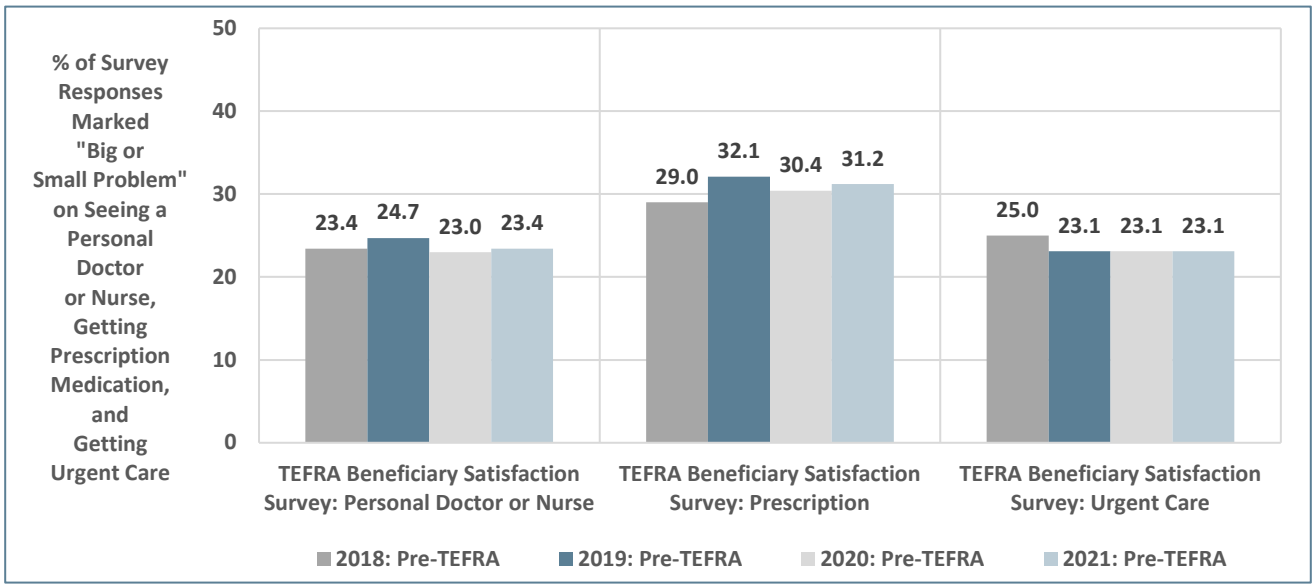
- Each survey year's absolute percentage difference between pre-TEFRA and post-TEFRA results on respondents marking a big or small problem getting urgent care was from the minimum difference of 15.5% to maximum difference of 19.7%.

- The 2018 survey displayed the highest absolute percentage difference and 2019 survey displayed the lowest absolute percentage difference between pre-TEFRA and post-TEFRA.

Figure 19 graphically expresses the survey responses regarding pre-TEFRA access to care when seeing a personal doctor or nurse, access for prescription medications, and urgent care access. Based

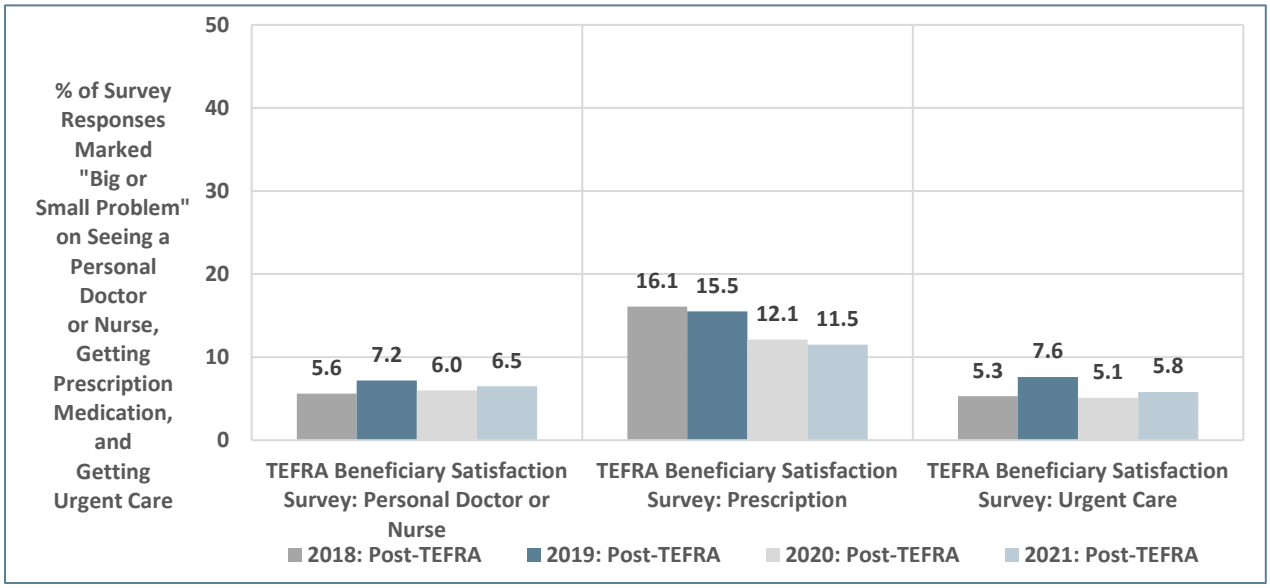
on the responses received by the survey, beneficiaries stated they experienced a “big or small problem” with prescriptions the most across all years, compared to personal doctor or nurse, or urgent care. A “big or small problem” with urgent care has been constant at 23.1% since CY2019.

Figure 19: Measure 3.2a (Survey-based of Pre-TEFRA: Personal doctor or nurse), Measure 3.2b (Survey-based of Pre-TEFRA: Prescription), and Measure 3.2c (Survey-based of Pre-TEFRA: Urgent care) for 2018 - 2021



Like the pre-TEFRA, a similar trend is shown in **Figure 20**, where post-TEFRA survey responses indicate a “big or small problem” with prescriptions across all years. However, post-TEFRA survey responses indicate better access to care in all categories compared to pre-TEFRA.

Figure 20: Measure 3.2a (Survey-based of Post-TEFRA: Personal doctor or nurse), Measure 3.2b (Survey-based of Post-TEFRA: Prescription), and Measure 3.2c (Survey-based of Post-TEFRA: Urgent care) for 2018 - 2021



Hypothesis 4.1

In summary for **Hypothesis 4.1**, findings for **Questions 4.1.a** indicate that TEFRA-like beneficiaries' overall perceptions of premium barriers as a "big financial burden" had an absolute four percentage point decrease between 2018 to 2021 from the TEFRA Beneficiary Satisfaction Survey. Findings for **Question 4.1b** show that TEFRA-like beneficiaries' perceptions of a "big financial burden," distributed among the different premium brackets, have remained stable in all brackets from 2019 to 2021 with no significant differences.

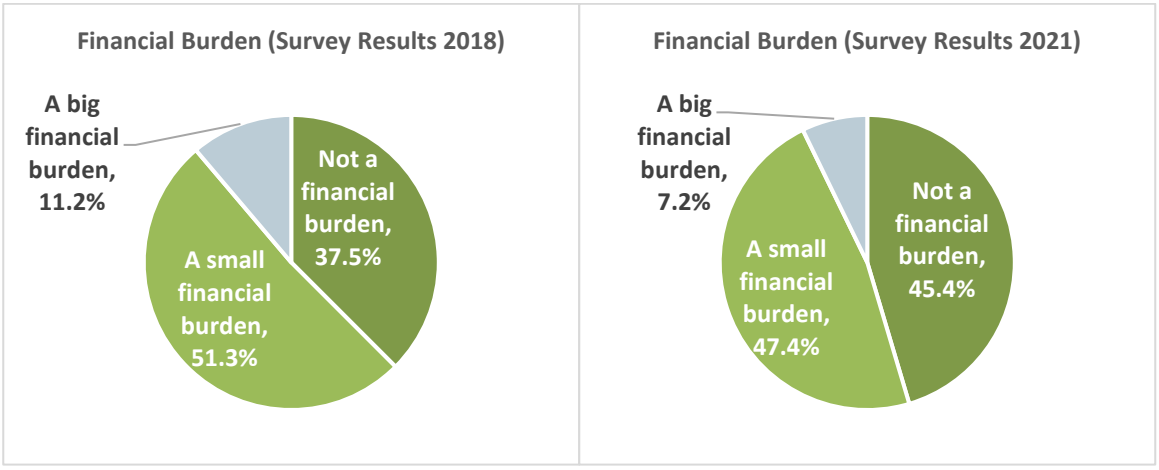
The number of beneficiaries that responded in 2018 – 2021 to the TEFRA survey question "In the last 6 months, how much of a financial burden, if any, was it to pay the TEFRA program premiums?" was a small percentage of the total number of TEFRA-like beneficiaries for each of the listed years. (i.e., 76 responses in 2018, 49 responses in 2019, 43 responses in 2020, and 33 responses in 2021.) These response numbers become even more minuscule once the responses were broken down into each premium bracket.

For **Question 4.1a**., the IE addressed the percentage of TEFRA-like beneficiaries that experienced a premium barrier. While comparing results for 2018 – 2021, survey scores regarding how much of a "big financial burden" it was to pay TEFRA premiums overall in the last six months gradually decreased:

- An overall four percentage point absolute decrease from 2018 to 2021, a significant

difference between baseline (2018) and current (2021), of respondents (76 in 2018 to 33 in 2021) that marked “big financial burden.”

Figure 21: Financial Burden TEFRA Survey Results for 2018 and 2021



- Rates decreased from 11.2% in 2018, to 8.7% in 2019, to 8.2% in 2020, then again in 2021 to 7.2% (see **Figure 21** for 2018 and 2021). No significant difference between 2018 and 2019 and then again, no significant difference between 2020 and 2021.

While perceptions of premium barriers being a “big financial burden” decreased over the years of 2018 – 2021, for **Question 4.1b** the IE identified how the different premium ranges vary for TEFRA-like beneficiaries experiencing a premium barrier.

The TEFRA beneficiary survey responses provided a breakdown of beneficiaries’ views regarding the different premium brackets as a “big financial burden” throughout the years of 2019 - 2021. While the response percentages remained stable for higher monthly TEFRA premium brackets from 2018 to 2021, there are percentage results worth noting:

- A breakdown of the responses shows that when comparing 2018 through 2021, the monthly TEFRA premium range of $364 - $416 showed the highest average big financial burden response percentages among all four years.
- The premium range of $364 - $416 was continually marked a “big financial burden” with some of the highest percentages until 2021.
- However, in 2021, 23.5% (33 survey respondents) marked the lower monthly TEFRA bracket of $208 - $250 as a "big financial burden. (See **Table 5** below)

Table 5: Measure 4.1b (Survey-based premium ranges for premium barriers)[9] for 2018 – 2021

TEFRA Premium	% of Survey Responses Who Answered the Financial Burden as "A Big Financial Burden" (# of Respondents/Valid N)			
	2018 TEFRA Beneficiary Satisfaction Survey	2019 TEFRA Beneficiary Satisfaction Survey	2020 TEFRA Beneficiary Satisfaction Survey	2021 TEFRA Beneficiary Satisfaction Survey
$0	1.9% (1/53)	0.0% (0/47)	0.0% (0/31)	0.0% (0/21)
$20–$41	7.0% (6/86)	6.7% (5/75)	5.3% (3/57)	4.3% (2/46)
$52–$78	10.0% (17/170)	12.0% (16/133)	2.3% (3/129)	3.7% (4/107)
$93–$125	6.8% (9/132)	6.7% (8/120)	8.7% (9/103)	3.0% (3/101)
$145–$182	18.8% (16/85)	5.9% (4/68)	11.3% (9/80)	7.4% (5/68)
$208–$250	19.1% (9/47)	18.2% (6/33)	9.5% (4/42)	**23.5% (8/34)**
$281–$328	**25.9% (7/27)**	5.3% (1/19)	**27.3% (6/22)**	18.2% (4/22)
$364–$416	**25.0% (5/20)**	**21.1% (4/19)**	**21.4% (3/14)**	16.7% (3/18)
$458	13.7% (7/51)	11.1% (5/45)	14.6% (6/41)	11.8% (4/34)
Total # of Respondents Who Answered "A Big Financial Burden"	**76**	**49**	**43**	**33**

To address this as part of **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*), some implications for TEFRA policy change regarding premiums have already been incorporated and there are plans for further policy change to be implemented in the future.

Policy changes that have already been implemented include system enhancements and improvement in communications. Changes to beneficiary notices/invoices allow for a more user-friendly experience, as well as greater access to account information and customer service. In addition, the frequency of invoicing was changed from quarterly billing to monthly billing to allow for smaller, more frequent payments.

Some intended TEFRA policy changes are also planned for future implementation. In particular, the TEFRA beneficiary survey asks a variety of questions about customer service and TEFRA premiums,

[9] 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?"

but it did not include a question specific to inquiries related to family changes in income for premium reconsideration. DHS has requested that a question be added to the 2022 TEFRA survey to allow the agency to better gauge any issues specific to that issue.

Hypothesis 4.2

For **Hypothesis 4.2**, the IE's focus was to reduce the number of reasons why Arkansas TEFRA-like beneficiaries' cases were closed (due to program barriers of health care access if the premium barriers for TEFRA-like beneficiaries remain stable over time). Results were used from the TEFRA Disenrollee Beneficiary Survey, an additional TEFRA survey conducted by the survey vendor for 2018 only and not conducted in 2019, 2020 or 2021.

In summary for **Hypothesis 4.2**, due to the TEFRA Disenrollee Survey only being provided during 2018, the number of reasons why Arkansas TEFRA-like beneficiaries' cases were closed could not be reviewed over time. The IE did compare survey scores between TEFRA disenrollee to TEFRA enrollee, as well as ARKids First A and ARKids First B, and found no significant difference on access to health care services of "Getting care quickly" and "Special therapies of speech and physical therapies."

For **Question 4.2a**, the IE evaluated the top five reasons why Arkansas TEFRA-like beneficiaries' cases were closed. TEFRA disenrollee beneficiary survey respondents were asked who closed their child's TEFRA case, where a majority (69.9%) reported closure by DHS/Medicaid. The top five reasons for closure of a child's TEFRA case include the following:

1. "No longer eligible" (40 respondents),
2. "Other" (39 respondents),
3. "Could not afford premium payment" (17 respondents),
4. "TEFRA services no longer needed" (14 respondents),
5. "Could not complete paperwork on time", and "Obtained other coverage" (tie with 8 respondents each).

TEFRA-like closure data was analyzed to identify the top five reasons why TEFRA-like beneficiary cases were closed on more recent data. **Table 6** displays the reason descriptions and number of cases counts for 2018, 2019 and 2020. The 2021 results will be provided in the summative report as clarification of data source is under review. Across all three years of 2018 - 2020 the top reason TEFRA-like beneficiary cases closed was "eligible another category."

Table 6: Measure 4.2a (Closure-based reasons why cases closed): Top Five Reasons Why TEFRA-like Beneficiary Cases Closed for 2018 - 2020

Top Five Reasons Why TEFRA-like Beneficiary Cases Closed (Counts)		
2018	**2019**	**2020**
1. Failed to provide information (116)	1. **Eligible another category (119)**	1. Requested closure (253)
2. **Eligible another category (32)**	2. Failed to provide information (80)	2. **Eligible another category (103)**
3. Negation retro (26)	3. Other-non need (25)	3. Child reached age limit (63)
4. Child reached age limit (15)	4. Refused other requirement (21)	4. TEFRA-no last 3 month premium (42)
5. Other-non need/TEFRA-no last 3-month premium (14)	5. Child reached age limit/Negation retro (19)	5. Failed to provide information (41)

For **Question 4.2b**, the IE gauged how patient perception of 'getting care quickly' during lockout periods compared with similar perceptions among enrolled patients. The TEFRA Disenrollee Beneficiary Survey's total composite score for "Getting care quickly" during 2018 was lower, at 84.0%, as compared to other beneficiary satisfaction survey scores of 94.8% (TEFRA survey), 93.7% (ARKids First A survey), and 89.8% (ARKids First B survey).

For **Question 4.2c**, the IE determined how difficult it is to get speech, occupational, and physical therapy during a lockout period. This was found by comparing the "Special therapies" composite score of 54.8% (from the TEFRA Disenrollee Beneficiary Survey) to the composite score of 89.6% (from the TEFRA Beneficiary Satisfaction Survey). Out of all three therapies, speech had the highest score of 62.2% for "Not a problem." This was for the child to get the speech therapy needed while the TEFRA case was closed during 2018 (see **Table 7**).

Table 7: Measure 4.2c (Survey-based getting care quickly for disenrollees)[10] for 2018

Therapy Services (Survey-Based)	Scores (Percentage) "Not a problem"		Statistically Significance Testing ($p < 0.05$)
	2018 TEFRA Beneficiary Satisfaction Survey	2018 TEFRA Disenrollee Beneficiary Survey	
Getting speech therapy	88.5%	62.2%	Not significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA Survey Scores
Getting occupational therapy	89.1%	50.0%	Significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA Survey Scores
Getting physical therapy	91.2%	52.2%	Not significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA Survey Scores
Total (Composite) (Special therapies)	**89.6%**	**54.8%**	**N/A**

For **Question 4.2d**, the IE explored 1) what types of medical services were not met for patients experiencing a lockout period and 2) how patients' experiences varied by common diagnosis. **Table 8** displays the types of medical services beneficiaries were not able to receive because they were not enrolled in the TEFRA program. Also, this table displays the top five primary diagnosis conditions, as listed in the evaluation design. Question 13, from the 2018 Disenrollee Beneficiary Survey, asks disenrollees what types of medical services they could not receive when not enrolled in TEFRA. "Special therapy" was the second highest response, at 22.8%, and "Other" was the top response, at 31.5%.

- Some reasons listed in the "Other" field included the following (listed in alphabetical order):
    - Advanced family eye care
    - Developmental preschool services
    - Enteral supplies
    - Home health
    - Mental health
    - Referrals to adult specialists
    - Sleep clinic
    - Supplies
    - Therapist and psychiatrist

[10] Survey-based therapy services (i.e. special therapies) for disenrollees: Percentage of survey responses marked "Not a problem" by a) speech, b) occupational, and c) physical therapy services

Table 8: Measure 4.2d (Survey-based medical services not received for disenrollees)[11] for 2018

Responses for Medical Services Not Received for Disenrollees (Survey-Based)	2018 TEFRA Disenrollee Beneficiary Survey		Top Five Primary Diagnosis Conditions for TEFRA-Like Beneficiaries*
	# of Reponses	% of Responses	
Regular physician visits	8	8.7%	1) Attention Deficit Hyperactivity Disorders, 2) Mood Disorders, 3) Anxiety/ Nonpsychotic Disorders, 4) Adjustment Disorders, and 5) Child/ Adolescent Emotional Disorders
Visits to a specialist	10	10.9%	
Emergency room visits	1	1.1%	
Dental visits	6	6.5%	
Prescription medicine	11	12.0%	
Special therapy	21	22.8%	
Medical equipment	6	6.5%	
Other	29	31.5%	

*Based off the top 5 highest volume of TEFRA-like beneficiaries during CY2018.

VII. Conclusions

The IE evaluated a total of 25 measures consisting of claims-based and survey-based measures. Of the 25 measures evaluated, 12 were claims-based, and 13 were survey-based. Nine of the claims-based measures consisted of a comparison between the TEFRA-like and non-TEFRA-like populations. The remaining three claims-based measures comparison consisted of the TEFRA-like only population across all performance years (2018-2021). Of the 12 claims-based measures, eight either outperformed or were similar to their comparison group or displayed consistent or improved results over the performance periods. Eight of the survey-based measures compared the TEFRA Beneficiary Satisfaction Survey results against the ARKids First A Beneficiary Satisfaction Survey, ARKids First B Beneficiary Satisfaction Survey, and TEFRA Disenrollee Beneficiary Survey results, which resulted in no significant difference in the scores. The final five survey-based measures used results from the TEFRA Beneficiary Satisfaction Survey only. As described below in more detail, the TEFRA-like demonstration continued to succeed in meeting the goals of the program. See **Appendix D** for full results.

[11] 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?

Claims-Based Conclusions

Seven of the nine claims-based measures, see **Table 9** for these measures denoted with an asterisk (*), for comparison between the TEFRA-like population vs. the non-TEFRA-like population, the TEFRA-like population outperformed or were not significantly different than the non-TEFRA-like population from 2018 through 2021. The remaining two measures of Measure 1.1c (CAP) and Measure 1.2b (Average cost per prescription [Rx] per beneficiary) identified that the majority of outcome comparisons for the non-TEFRA-like population outperformed the TEFRA-like population showing significantly different (lower outcomes for TEFRA-like population).

Table 9: TEFRA-Like Population vs. Non-TEFRA-Like Population Claims-based Measure Comparisons for CY2018 - CY2021

Claims-based Measures	Statistically Significance Testing ($p < 0.05$) Comparison	Findings
Measure 1.1a - Therapy services*	Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020 and CY2021	TEFRA-like outperformed Non-TEFRA-like
Measure 1.1c - Children and Adolescents' Access to Primary Care Practitioners (CAP)	Ages 12 Months – 6 Years (Child): Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020 and CY2021 Ages 7 Years – 18 Years (Adolescent): Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018; Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019, CY2020, and CY2021	Non-TEFRA-like outperformed or similar to TEFRA-like
***Measure 1.2a - Proportion of days covered (PDC) threshold of 50%**	Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2020 and CY2021; Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019	TEFRA-like outperformed or similar to Non-TEFRA-like
Measure 1.2b - Average cost per prescription (Rx) per beneficiary	Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020, and CY2021	Non-TEFRA-like outperformed TEFRA-like
***Measure 1.2c - Prescriptions (Rx) per beneficiary per month (PBPM)**	Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020 and CY2021	TEFRA-like outperformed Non-TEFRA-like
***Measure 1.2d - Anti-Seizure Medications**	Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020 and CY2021	TEFRA-like outperformed Non-TEFRA-like
***Measure 2.2a - Third Party Liability (TPL) coverage**	Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020 and CY2021	TEFRA-like outperformed Non-TEFRA-like
***Measure 2.2b - Third Party Liability (TPL) coverage & CAP**	Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020 and CY2021	TEFRA-like similar to Non-TEFRA-like
***Measure 2.3a - Durable Medically Equipment (DME) coverage**	Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018, CY2019, CY2020 and CY2021	TEFRA-like outperformed Non-TEFRA-like

* The TEFRA-like population outperformed non-TEFRA-like population for these seven measures.

** Three therapy services of speech, occupational, and physical.

Of the three claims-based measures, where comparison between performance periods was completed on the TEFRA-like population only, the TEFRA-like population showed a decline in performance for Measure 2.1a and Measure 2.1b but an improvement in performance for Measure 2.1c from 2018 through 2021. Preventive care services of PCP or therapy services for newly enrolled TEFRA-like beneficiaries within 60 days of enrollment decreased over time. This measure has an opportunity for improvement in future reporting years.

Table 10: TEFRA-Like Population Only Claims-based Measure Comparisons for CY2018 - CY2021

TEFRA-Like Population Only Claims-based Measures	Statistically Significance Testing ($p < 0.05$) Comparison	Findings
Measure 2.1a - First health care visit to PCP w/in 60 days	Not significantly different between CY2019 vs. CY2018, CY2020 vs. CY2018; Significantly different between CY2021 vs. CY2018, CY2021 vs. CY2020	Overall, measure showed a significant decrease between baseline compared to current
Measure 2.1b - First health care visit for therapy services w/in 60 days	Not significantly different between CY2019 vs. CY2018, CY2021 vs. CY2020; Significantly different between CY2020 vs. CY2018, CY2021 vs. CY2018	Overall, measure showed a significant decrease between baseline compared to current
Measure 2.1c - Average length of TEFRA-like segments	Significantly different between CY2019 vs. CY2018, CY2020 vs. CY2018, CY2021 vs. CY2018, CY2021 vs. CY2020	Overall, measure showed a significant increase between baseline compared to current

Survey-Based Conclusions

All three survey-based measures for comparison between the TEFRA Beneficiary Satisfaction Survey, the ARKids First A and ARKids First B Beneficiary Satisfaction Surveys, the TEFRA-like satisfaction scores outperformed or were not significantly different than the comparison surveys.

Table 11: TEFRA Beneficiary Satisfaction vs. ARKids First A and ARKids First B Beneficiary Satisfaction Survey-based Measure Comparisons for 2018 – 2021

Survey-based Measures	Statistically Significance Testing ($p < 0.05$) Comparison (2018-2021)	Findings
Measure 3.1a - Getting care quickly	Not significantly different between TEFRA vs. ARKids First A & ARKids First B	TEFRA survey scores outperformed or are similar to the ARKids First A & ARKids First B survey scores
Measure 3.1b - How well doctors communicate	Not significantly different between TEFRA vs. ARKids First A & ARKids First B	TEFRA survey scores outperformed or are similar to the ARKids First A & ARKids First B survey scores
Measure 3.1c - Overall health care	Not significantly different between TEFRA vs. ARKids First A & ARKids First B	TEFRA survey scores outperformed or are similar to the ARKids First A & ARKids First B survey scores

All five survey-based measures, where analysis was completed on TEFRA surveys only, the TEFRA scores showed a positive improvement or were not significantly different from 2018 through 2021. Three of the five survey-based measures analyzed survey scores for a patient's experience of their health care plan within the six months prior to enrollment in TEFRA (pre-TEFRA) compared to post enrollment within a TEFRA health plan (post-TEFRA). The TEFRA survey findings as favorable performance in the following measures.

Table 12: TEFRA Beneficiary Satisfaction Only Survey-based Measure Comparisons for 2018 - 2021

TEFRA Beneficiary Satisfaction Only Survey-based Measures	Statistically Significance Testing (p < 0.05)	Findings
	Comparison	
Measure 1.1b - Survey-based therapy services	Not significantly different between 2019 vs. 2018, 2020 vs. 2018, 2021 vs. 2018, 2021 vs. 2020	Overall, measure showed no significant difference between years
Measure 3.2a - Survey-based of Pre-TEFRA vs. Post-TEFRA: Personal doctor or nurse	Significantly different between Pre-TEFRA vs. Post-TEFRA 2018, 2019, 2020, and 2021 TEFRA Survey Scores	Overall, measure showed significant difference (improvement) from Pre-TEFRA compared to Post-TEFRA
Measure 3.2b - Survey-based of Pre-TEFRA vs. Post-TEFRA: Prescription	Significantly different between Pre-TEFRA vs. Post-TEFRA 2018, 2019, 2020, and 2021 TEFRA Survey Scores	Overall, measure showed significant difference (improvement) from Pre-TEFRA compared to Post-TEFRA
Measure 3.2c - Survey-based of Pre-TEFRA vs. Post-TEFRA: Urgent care	Significantly different between Pre-TEFRA vs. Post-TEFRA 2018, 2019, 2020, and 2021 TEFRA Survey Scores	Overall, measure showed significant difference (improvement) from Pre-TEFRA compared to Post-TEFRA
Measure 4.1a - Survey-based premium barriers	Not significantly different between 2019 vs. 2018, 2020 vs. 2018; Significantly different between 2021 vs. 2018, 2021 vs. 2020	Overall, measure showed significant difference (decline) between baseline to current

Results presented in the interim evaluation show that the demonstration was effective in achieving most goals and objectives established at the beginning of the current TEFRA-like demonstration. Impacts to **Hypothesis 4.2** will need to be reviewed due to the TEFRA Disenrollee Beneficiary Survey only being performed in 2018 and not during 2019 - 2021 and incorporated the TEFRA-like closure data. For example, Measure 4.2b (Getting care quickly for disenrollees), Measure 4.2c (Survey-based therapy services for disenrollees), and Measure 4.2d (Medical services not received for disenrollees), only reported comparisons between TEFRA Beneficiary Satisfaction Survey and TEFRA Disenrollee Beneficiary Survey only during 2018. More details are provided in the “Lessons Learned and

Recommendations" section of this report.

VIII. Interpretations, Policy Implications, and Interactions with Other State Initiatives

The TEFRA-like demonstration continues to show success providing the needed care to enrolled beneficiaries. The program is considered well established, well known to the community, and stable. Benchmarking survey scores calculated by NCBD reflected only the most positive response. Therefore, the ARKids First A and ARKids First B composites and ratings were not able to be used for comparison purposes. NCQA's State of Healthcare Quality Report was also reviewed for national Medicaid HMO CAP rates for children and young adults, 12 months to 19 years of age, for comparison. NCQA's national Medicaid HMO CAP (CY2018 and CY2019), CMS's Quality of Care for Children in Medicaid and CHIP 2019 Child Core Set Chart Pack (CY2018 only) CAP, and Arkansas Medicaid CAP (CY2018 only) rates were compared to TEFRA-like CAP rates. TEFRA-like CAP rates were above in all but one age group compared to the CAP rates for national Medicaid HMO, the Child Core Set Chart Pack, and Arkansas Medicaid. For more detailed information, refer to **Hypothesis 1.1** results.

Due to longevity of the demonstration, interpretation for a non-TEFRA-like population is difficult to measure. Furthermore, the IE outlined the challenges surrounding the selection of a non-TEFRA-like population. In other words, this refers to the challenges of identifying a comparison population with similar medical conditions or diagnoses. (This is displayed in **Table 4**, in the section labeled **Hypotheses 2.3**. This compares the top three diagnoses between the TEFRA-like and non-TEFRA-like populations.) Despite these limitations, conclusions can be drawn from this analysis.

To further advance beneficiary/guardian satisfaction, a business operation review resulted in the planned implementation of enhancements to decrease ambiguity in the TEFRA invoice, ensure DMS receives timely TEFRA premium payments, provide notice of past due account balances, and provide awareness concerning TEFRA policy changes (by creating easier to read statements and improved notification of rate changes and late premiums). In addition, a process is in place to forgive premium payments in arrears for 12 months or more, based on specific past TEFRA eligibility closure reasons. As previously mentioned, comparisons within Arkansas and with other states can be challenging.

IX. Lessons Learned and Recommendations

TEFRA Disenrollee Beneficiary Survey and TEFRA-Like Closure Data

Due to the TEFRA Disenrollee Beneficiary Survey only being performed in 2018, re-evaluation of Hypothesis 4.2 is recommended. Originally, the focus was to reduce the number of reasons why Arkansas TEFRA-like beneficiaries' cases were closed due to program barriers of health care access, and to assess whether the premium barriers remain stable over time. Consideration is being given as to the cost and benefit of commissioning this survey again in the future. Before administering this kind of TEFRA survey again, a review and restructuring of the survey instrument may be warranted. A resolution to the ambiguity of responses that fell into the "Other" category should also be examined. In addition, revisiting the general survey configuration, including the selected population for the survey, should be considered.

We suggest monitoring the reasons why TEFRA-like beneficiaries were closed due to potential program barriers of health care access by evaluating the Division of County Operation's (DCO) closure list. This information allows the ability to identify broader reasons why enrollees left the TEFRA-like program and to track over time and pinpoint closure reasons due to health care access. Our recommendation is to update the survey structure or explore another source for this type of information such as the DCO. Another recommendation is to investigate closure reason of "TEFRA no last 3-month premium" as identified within the top five closure reasons for 2018 and 2020. This will allow monitoring of the monthly TEFRA premium ranges, Measure 4.1b[12], since the recent TEFRA survey 2021 results reflected a lower monthly TEFRA premium bracket of $208 - $250, where 23.5% (33 respondents) marked a "big financial burden".

PCP Visits and Special Therapy Services

For Measure 1.1c[13], the TEFRA-like population was significantly different (lower) than the non-TEFRA-like population (for 12 months to 6 years) who had a visit with a PCP across all four years. Although the TEFRA-like population is seeing their PCP at a high rate, it is not as high as the non-TEFRA-like population. Therefore, our recommendation is to provide more education regarding the proper coordination of care through their PCP.

[12] Measure 4.1b (Survey-based premium ranges for premium barriers): 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?"

[13] Measure 1.1c (Children and Adolescents' Access to Primary Care Practitioners (CAP)): The percentage of beneficiaries 12 months–18 years of age who had a visit with a PCP.

For Measure 2.1a[14] and Measure 2.1b[15], we suggest observing for the newly enrolled TEFRA-like beneficiaries. This is because special therapy services are a major reason for this population to enroll. Measure 2.1a identified rates for first healthcare visit to PCP within 60 days after enrollment decreased in last two years for all demographics after a slight increase in CY2019. Between CY2020 (36.3%) and CY2021 (22.7%), age group 13 -18 had the largest rate drop who received first health care visit to PCP within 60 days of enrollment. First healthcare visit for therapy services within 60 days after enrollment, as analyzed in Measure 2.1b, displayed a trending decline from baseline (CY2018) through interim results. The rate of newly enrolled TEFRA-like beneficiaries received their first health care visit to speech, occupational, or physical therapy services within 60 days of enrollment during CY2018 was over 43%. During CY2019, the rate dropped to 38.7% and continued to drop in the last two years (CY2021 at 32.2%). Since therapy is a major part of the care that is received by the TEFRA-like population, and considering these declining rates from CY2018 through CY2021, our recommendation is to provide additional education to newly enrolled TEFRA-like beneficiaries. This education will help them learn of available special therapy services in their area.

In the final evaluation, the IE would like to explore additional claims data to be included within the measures. The initial analysis included only Fee for Service (FFS) claims. Therefore, the inclusion of additional data will ensure that the IE has explored all information to be used in the measure calculations. The two data sources are Provider-Led Arkansas Shared Savings Entity (PASSE) encounter claims and medical claims from other insurance carriers. The PASSE encounter claims for those beneficiaries that were enrolled in a new Medicaid program (launched March 1, 2019) and any other insurance provider for TPL medical claims.

[14] Measure 2.1a (First health care visit to PCP w/in 60 days): 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.

[15] Measure 2.1b (First health care visit for therapy services w/in 60 days): 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 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.

X. Attachments

Appendix A. Driver Diagram

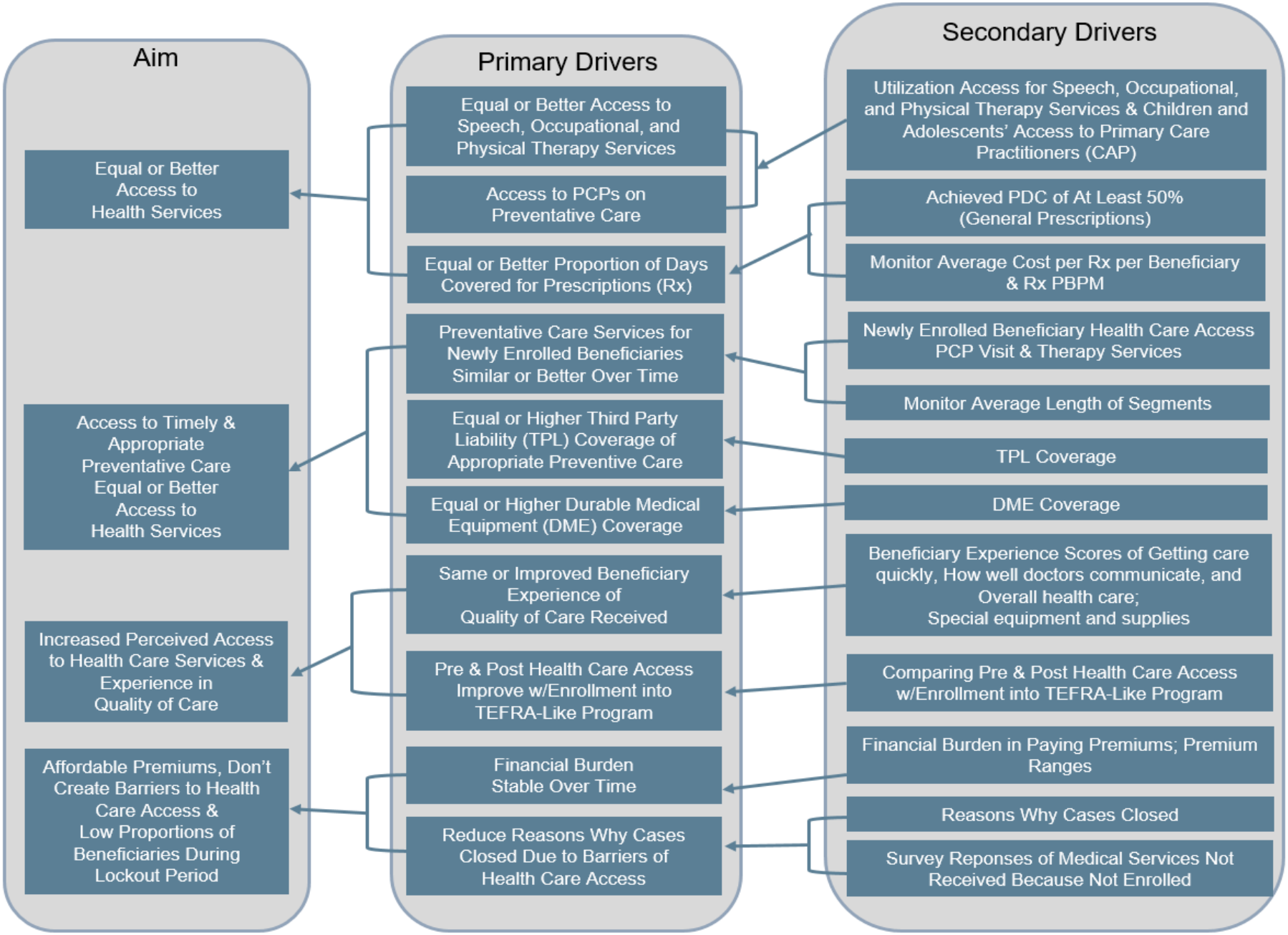
Appendix B. Four Goals with Evaluation Hypotheses and Drivers

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

Appendix D. Evaluation Outcome and Measure Results

Appendix E. CMS-approved Evaluation Design

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 Measures, Comparison Populations, Data Sources, and Analytic Methods Summary Table

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

Hypothesis 1.1 and 1.2 uses a chi-squared test to evaluate statistically significant differences between the TEFRA-like demonstration population and the Medicaid non-TEFRA- like population for beneficiary level measures and survey-based measures. Wilcoxon-Mann-Whitney test is used for event level measures, which is a non-parametric analog to the t-test, as the data are not normally distributed. The analysis 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).***

Measure 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.”
Measure Steward:	DMS Homegrown

Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared test

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. The enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. Only one beneficiary per household was selected for participation. A selected member may have been age 18 when selected and age 19 when filling out this survey.
Research Question(s):	1.1b
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2021 (interim evaluation report); 2018 – 2023 (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):	Chi-squared test

Measure 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 measure 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
Measure 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 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared test
National Benchmark:	CMS Core Set Mean Rate Across Reported States by CMS[16]; NCQA's State of Health Report Card (Medicaid HMO)[17]

[16] 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.

[17] 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

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).***

Measure 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)
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”.
Measure Steward:	PQA-Like/DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared test

Measure 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.

care. https://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality-report/.

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.
Measure Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Wilcoxon-Mann-Whitney test

Measure 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.
Measure Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared test

Measure 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.
Measure Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared test

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

Hypothesis 2.2 - 2.3 uses a chi-squared test to evaluate statistically significant differences between the TEFRA-like demonstration population and the Medicaid non-TEFRA- like population for beneficiary level measures and survey-based measures. Wilcoxon-Mann-Whitney test is used for event level measures, which is a non-parametric analog to the t-test, as the data are not normally distributed. The analysis 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.***

Measure 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.
Measure 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 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) for summative evaluation report
Comparison Group:	Trend over time of TEFRA-like coverage
Comparison Method(s):	Longitudinal data analysis; Chi-squared test

Measure 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”.
Measure 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 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared test

Measure 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.
Measure Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) for summative evaluation report
Comparison Group:	Trend over time of TEFRA-like coverage
Comparison Method(s):	Longitudinal data analysis; Wilcoxon-Mann-Whitney test

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).***

Measure 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”.
Measure Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared test

Measure 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 measure 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
Measure 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 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared 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).***

Measure 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 condition 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).
Measure Steward:	DMS Homegrown
Data Source(s):	MMIS eligibility and beneficiary demographic files linked to claims-based data files
Measurement Period:	2018 – 2021 (January 1, 2018 – December 31, 2021) for interim evaluation report; 2018 – 2023 (January 1, 2018 – December 31, 2023) 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; Chi-squared 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*, Measures 3.1a – 3.1c and 3.2a – 3.2c are 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. Individual questions are used from each of the three domains. Composite scores were not used for the significance testing due to beneficiary level satisfaction survey data not being available to the evaluation IE. A composite score domain combines the responses of two or more questions, except for "Overall health care" domain, to obtain a single score. The individual questions and composite domains represent the percentage of beneficiaries that 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 are used to assess whether beneficiary experience has improved over time or remained the same. The scores, where available, is compared to both ARKids First A and First B beneficiary satisfaction survey data. 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 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.***

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey. For Child (ARKids First A) Beneficiary Satisfaction Survey, the sampling frame for child consisted of all ARKids First A primary care case management (PCCM) enrollees who were 17 years old or younger as of December 31 prior to survey year. For Child (ARKids First B) Beneficiary Satisfaction Survey, the sampling frame for child consisted of all ARKids First B PCCM enrollees. The child beneficiaries' six-month continuous enrollment began July 1 prior to survey year. Only one beneficiary per household was selected for participation.
Research Question(s):	3.1a
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	TEFRA Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey: 2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report); Child (ARKids First A) Beneficiary Satisfaction Survey: 2017, 2019, & 2021 (interim evaluation report); 2017, 2019, 2021, & 2023 (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):	Chi-squared test
National Benchmark:	NCBD

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey. For Child (ARKids First A) Beneficiary Satisfaction Survey, the sampling frame for child consisted of all ARKids First A primary care case management (PCCM) enrollees who were 17 years old or younger as of December 31 prior to survey year. For Child (ARKids First B) Beneficiary Satisfaction Survey, the sampling frame for child consisted of all ARKids First B PCCM enrollees. The child beneficiaries' six-month continuous enrollment began July 1 prior to survey year. Only one beneficiary per household was selected for participation.
Research Question(s):	3.1b
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	TEFRA Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey: 2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report); Child (ARKids First A) Beneficiary Satisfaction Survey: 2017, 2019, & 2021 (interim evaluation report); 2017, 2019, 2021, & 2023 (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):	Chi-squared test

National Benchmark:	NCBD

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey. For Child (ARKids First A) Beneficiary Satisfaction Survey, the sampling frame for child consisted of all ARKids First A primary care case management (PCCM) enrollees who were 17 years old or younger as of December 31 prior to survey year. For Child (ARKids First B) Beneficiary Satisfaction Survey, the sampling frame for child consisted of all ARKids First B PCCM enrollees. The child beneficiaries' six-month continuous enrollment began July 1 prior to survey year. Only one beneficiary per household was selected for participation.
Research Question(s):	3.1c
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	TEFRA Beneficiary Satisfaction Survey and Child (ARKids First B) Beneficiary Satisfaction Survey: 2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report); Child (ARKids First A) Beneficiary Satisfaction Survey: 2017, 2019, & 2021 (interim evaluation report); 2017, 2019, 2021, & 2023 (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	Chi-squared test

Method(s):	
National Benchmark:	NCBD

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

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey.
Research Question(s):	3.2a
Sub-group:	Pre-TEFRA vs. Post-TEFRA
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	Chi-squared test

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey.
Research Question(s):	3.2b
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores.
Comparison Method(s):	Chi-squared test

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey.
Research Question(s):	3.2c
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	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, Measures 4.1a – 4.1b and 4.2a – 4.2d are used.

The IE reviewed the top five reasons why TEFRA-like beneficiary cases were closed. This will aid in understanding the reasons for disenrollment and if a child is receiving health care during a closed case. The state investigated 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 Satisfaction Survey data, where applicable for measurement periods. Lastly, the state will compare the common medical services a patient could not get when 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.***

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey.
Research Question(s):	4.1a
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	Chi-squared test

Measure 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:	Each beneficiary must be enrolled for a minimum of six months with no more than one gap in enrollment of up to 30 days prior to participating in the survey. Although NCQA defines the allowable gap as 45 days, the survey vendor sets criterion at 30 days because enrollment data is reported monthly. For TEFRA Beneficiary Satisfaction Survey, the enrollment period from which the sampling is drawn is January 1 through June 30 of the survey year. A selected member may have been age 18 when selected and age 19 when filling out this survey.
Research Question(s):	4.1b
Measure Steward:	NCQA/DMS/Arkansas Foundation for Medical Care (AFMC)
Data Source(s):	CAHPS or CAHPS-like questions modeled after CAHPS 5.0H/5.1H Medicaid Child survey; TEFRA Beneficiary Satisfaction Survey
Measurement Period:	2018 – 2021 (interim evaluation report); 2018 – 2023 (summative evaluation report)
Comparison Group:	Trend over time of TEFRA satisfaction survey scores
Comparison Method(s):	Chi-squared test

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

Measure 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
Measure 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; TEFRA-like closure data
Measurement Period:	2018 – 2021 (interim evaluation report) or as results are reported; 2018 – 2023 (summative evaluation report) or as results are reported.
Comparison Group:	Trend over time of top five reasons why TEFRA-like beneficiary cases were closed

Measure 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
Measure 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 – 2021 (interim evaluation report) or as results are reported; 2018 – 2023 (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):	Chi-squared test
National Benchmark:	NCBD

Measure 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
Measure 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 – 2021 (interim evaluation report) or as results are reported; 2018 – 2023 (summative evaluation report) or as results are reported.
Comparison Group:	TEFRA Beneficiary Satisfaction 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):	Chi-squared test

Measure 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
Measure 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 – 2021 (interim evaluation report) or as results are reported; 2018 – 2023 (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. Evaluation Outcome and Measure Results

Measure Number	Measure Name	Year 1 Measurement Period		Year 2 Measurement Period		Year 3 Measurement Period		Year 4 Measurement Period	
		TEFRA-Like Results	Non-TEFRA-Like Results	TEFRA-Like Results	Non-TEFRA-Like Results	TEFRA-Like Results	Non-TEFRA-Like Results	TEFRA-Like Results	Non-TEFRA-Like Results
Measure 1.1a	Claims-based therapy services: Speech	59.0%	15.5%	59.6%	15.6%	48.6%	12.3%	47.4%	12.5%
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
	Claims-based therapy services: Occupational	49.2%	9.5%	44.6%	9.0%	26.7%	5.7%	33.5%	6.8%
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
	Claims-based therapy services: Physical	64.9%	13.6%	64.4%	13.7%	54.5%	11.4%	52.4%	11.6%
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
Measure 1.1b	Survey-based therapy services: Speech	88.5%	N/A	89.5%	N/A	89.3%	N/A	89.8%	N/A
	Survey-based therapy services: Occupational	89.1%	N/A	90.4%	N/A	90.7%	N/A	90.3%	N/A
	Survey-based therapy services: Physical	91.2%	N/A	89.4%	N/A	92.7%	N/A	90.3%	N/A
		Not significantly different between 2019 vs. 2018 TEFRA Survey Therapy Scores				Not significantly different between 2020 vs. 2018 TEFRA Survey Therapy Scores		Not significantly different between 2021 vs. 2018 & 2020 TEFRA Survey Therapy Scores	
Measure 1.1c	Claims-based: Children and Adolescents' Access to Primary Care Practitioners (CAP) for Ages 12 Months – 6 Years (Child)	89.3%	97.8%	90.8%	97.7%	89.1%	97.0%	87.1%	97.5%
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
	Claims-based: Children and Adolescents' Access to Primary Care Practitioners (CAP) for Ages 7 Years – 18 Years (Adolescent)	93.0%	98.7%	94.3%	98.4%	94.4%	97.7%	93.1%	97.3%
		Significantly different between TEFRA-like vs. Non-TEFRA-like		Not significantly different between TEFRA-like vs. Non-TEFRA-like		Not significantly different between TEFRA-like vs. Non-TEFRA-like		Not significantly different between TEFRA-like vs. Non-TEFRA-like	

		during CY2018		during CY2019		during CY2020		during CY2021	
Measure 1.2a	Claims-based: Proportion of days covered (PDC) threshold of 50%	59.9%	56.0%	57.4%	56.1%	60.5%	55.7%	63.0%	58.3%
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
Measure 1.2b	Claims-based: Average cost per prescription (Rx) per beneficiary	$159.98	$99.82	$140.29	$69.86	$162.05	$65.44	$169.36	$63.96
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
Measure 1.2c	Claims-based: Prescriptions (Rx) per beneficiary per month (PBPM)	1.0	1.1	0.9	1.1	0.8	1.1	0.7	1.0
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
Measure 1.2d	Claims-based: Anti-Seizure	8.3%	5.9%	7.6%	5.7%	7.1%	5.6%	6.7%	5.7%
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
Measure 2.1a	Claims-based: First health care visit to PCP w/in 60 days	31.7%	N/A	36.7%	N/A	31.4%	N/A	22.5%	N/A
		Not significantly different between CY2019 vs. CY2018 TEFRA-like				Not significantly different between CY2020 vs. CY2018 TEFRA-like		Significantly different between CY2021 vs. CY2018 & CY2020 TEFRA-like	
Measure 2.1b	Claims-based: First health care visit for therapy services w/in 60 days	43.9%	N/A	38.7%	N/A	34.6%	N/A	35.1%	N/A
		Not significantly different between CY2019 vs. CY2018 TEFRA-like				Significantly different between CY2020 vs. CY2018 TEFRA-like		Significantly different between CY2021 vs. CY2018; Not significantly different between CY2021 vs. CY2020 TEFRA-like	
Measure 2.1c	Claims-based: Average length of TEFRA-like segments	9.8	N/A	10.0	N/A	10.4	N/A	10.9	N/A
		Significantly different between CY2019 vs. CY2018 TEFRA-like				Significantly different between CY2020 vs. CY2018 TEFRA-like		Significantly different between CY2021 vs. CY2018 & CY2020 TEFRA-like	
Measure 2.2a	Claims-based: Third Party Liability (TPL) coverage	69.7%	8.6%	74.3%	22.6%	73.8%	21.4%	72.5%	6.9%
		Significantly different between TEFRA-like vs. Non-TEFRA-like		Significantly different between TEFRA-like vs. Non-TEFRA-like		Significantly different between TEFRA-like vs. Non-TEFRA-like		Significantly different between TEFRA-like vs. Non-TEFRA-like	

		during CY2018		during CY2019		during CY2020		during CY2021	
Measure 2.2b	Claims-based: Third Party Liability (TPL) coverage & Children and Adolescents' Access to Primary Care Practitioners (CAP) for Ages 12 Months – 6 Years (Child)	91.0%	96.1%	91.9%	96.5%	90.9%	95.4%	89.9%	95.2%
		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
	Claims-based: Third Party Liability (TPL) coverage & Children and Adolescents' Access to Primary Care Practitioners (CAP) for Ages 7 – 18 Years (Adolescent)	93.7%	95.6%	94.7%	98.1%	95.2%	97.5%	94.4%	95.3%
		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Not significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
Measure 2.3a	Claims-based: Durable Medically Equipment (DME) coverage	40.8%	13.3%	38.0%	12.9%	36.0%	12.2%	33.0%	11.8%
		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2018		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2019		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2020		Significantly different between TEFRA-like vs. Non-TEFRA-like during CY2021	
Measure 3.1a	Survey-based: Getting care quickly (Obtaining care right away for an illness/injury/condition)	97.0%	97.1% (ARKids First A) 92.2% (ARKids First B)	97.9%	96.3% (ARKids First A) 97.0% (ARKids First B)	93.5%	96.3% (ARKids First A) 93.9% (ARKids First B)	97.5%	92.9% (ARKids First A) 93.5% (ARKids First B)
		Not significantly different between 2018 TEFRA vs. 2017 ARKids First A & 2018 ARKids First B Survey Scores		Not significantly different between 2019 TEFRA vs. 2019 ARKids First A & 2019 ARKids First B Survey Scores		Not significantly different between 2020 TEFRA vs. 2019 ARKids First A & 2020 ARKids First B Survey Scores		Not significantly different between 2021 TEFRA vs. 2021 ARKids First A & 2021 ARKids First B Survey Scores	
	Survey-based: Getting care quickly (Obtaining care when wanted, but not needed right away)	92.6%	90.2% (ARKids First A) 87.5% (ARKids First B)	92.3%	94.0% (ARKids First A) 93.7% (ARKids First B)	91.2%	94.0% (ARKids First A) 93.4% (ARKids First B)	93.7%	86.0% (ARKids First A) 82.9% (ARKids First B)
		Not significantly different between 2018 TEFRA vs. 2017 ARKids First A & 2018 ARKids First B Survey Scores		Not significantly different between 2019 TEFRA vs. 2019 ARKids First A & 2019 ARKids First B Survey Scores		Not significantly different between 2020 TEFRA vs. 2019 ARKids First A & 2020 ARKids First B Survey Scores		Not significantly different between 2021 TEFRA vs. 2021 ARKids First A & 2021 ARKids First B Survey Scores	
Measure 3.1b	Survey-based: How well doctors communicate (Doctors listening carefully to you)	97.3%	94.9% (ARKids First A) 97.0% (ARKids	97.9%	96.4% (ARKids First A) 97.2% (ARKids	97.2%	96.4% (ARKids First A) 96.0% (ARKids	97.8%	97.2% (ARKids First A) 95.3% (ARKids

			First B)		First B)		First B)		First B)
		Not significantly different between 2018 TEFRA vs. 2017 ARKids First A & 2018 ARKids First B Survey Scores		Not significantly different between 2019 TEFRA vs. 2019 ARKids First A & 2019 ARKids First B Survey Scores		Not significantly different between 2020 TEFRA vs. 2019 ARKids First A & 2020 ARKids First B Survey Scores		Not significantly different between 2021 TEFRA vs. 2021 ARKids First A & 2021 ARKids First B Survey Scores	
	Survey-based: How well doctors communicate (Doctors showing respect for what you had to say)	98.4%	96.7% (ARKids First A) 97.4% (ARKids First B)	97.9%	96.6% (ARKids First A) 98.2% (ARKids First B)	98.5%	96.6% (ARKids First A) 96.9% (ARKids First B)	98.1%	97.6% (ARKids First A) 97.5% (ARKids First B)
		Not significantly different between 2018 TEFRA vs. 2017 ARKids First A & 2018 ARKids First B Survey Scores		Not significantly different between 2019 TEFRA vs. 2019 ARKids First A & 2019 ARKids First B Survey Scores		Not significantly different between 2020 TEFRA vs. 2019 ARKids First A & 2020 ARKids First B Survey Scores		Not significantly different between 2021 TEFRA vs. 2021 ARKids First A & 2021 ARKids First B Survey Scores	
	Survey-based: How well doctors communicate (Doctors explaining things in an understandable way to your child)	83.9%	89.2% (ARKids First A) 93.0% (ARKids First B)	89.3%	92.5% (ARKids First A) 95.5% (ARKids First B)	85.0%	92.5% (ARKids First A) 94.2% (ARKids First B)	85.9%	94.8% (ARKids First A) 96.8% (ARKids First B)
		Not significantly different between 2018 TEFRA vs. 2017 ARKids First A & 2018 ARKids First B Survey Scores		Not significantly different between 2019 TEFRA vs. 2019 ARKids First A & 2019 ARKids First B Survey Scores		Not significantly different between 2020 TEFRA vs. 2019 ARKids First A & 2020 ARKids First B Survey Scores		Not significantly different between 2021 TEFRA vs. 2021 ARKids First A & 2021 ARKids First B Survey Scores	
	Survey-based: How well doctors communicate (Doctors spending enough time with your child)	93.7%	90.0% (ARKids First A) 95.8% (ARKids First B)	94.5%	91.0% (ARKids First A) 93.5% (ARKids First B)	94.2%	91.0% (ARKids First A) 92.4% (ARKids First B)	96.5%	91.7% (ARKids First A) 93.5% (ARKids First B)
		Not significantly different between 2018 TEFRA vs. 2017 ARKids First A & 2018 ARKids First B Survey Scores		Not significantly different between 2019 TEFRA vs. 2019 ARKids First A & 2019 ARKids First B Survey Scores		Not significantly different between 2020 TEFRA vs. 2019 ARKids First A & 2020 ARKids First B Survey Scores		Not significantly different between 2021 TEFRA vs. 2021 ARKids First A & 2021 ARKids First B Survey Scores	
Measure 3.1c	Survey-based: Overall health care (Rating of health care)	88.4%	85.6% (ARKids First A) 87.3%	89.6%	85.0% (ARKids First A) 86.7%	89.8%	85.0% (ARKids First A) 87.7%	93.1%	87.6% (ARKids First A) 89.1%

			(ARKids First B)		(ARKids First B)		(ARKids First B)		(ARKids First B)
		Not significantly different between 2018 TEFRA vs. 2017 ARKids First A & 2018 ARKids First B Survey Scores		Not significantly different between 2019 TEFRA vs. 2019 ARKids First A & 2019 ARKids First B Survey Scores		Not significantly different between 2020 TEFRA vs. 2019 ARKids First A & 2020 ARKids First B Survey Scores		Not significantly different between 2021 TEFRA vs. 2021 ARKids First A & 2021 ARKids First B Survey Scores	
Measure 3.2a	Survey-based of Pre-TEFRA vs. Post-TEFRA: Personal doctor or nurse (Comparing health care before and since enrolling in TEFRA)	23.4%	5.6%	24.7%	7.2%	23.0%	6.0%	23.4%	6.5%
		Significantly different between Pre-TEFRA vs. Post-TEFRA 2018 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2019 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2020 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2021 TEFRA Survey Scores	
Measure 3.2b	Survey-based of Pre-TEFRA vs. Post-TEFRA: Prescription (Comparing health care before and since enrolling in TEFRA)	29.0%	16.1%	32.1%	15.5%	30.4%	12.1%	31.2%	11.5%
		Significantly different between Pre-TEFRA vs. Post-TEFRA 2018 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2019 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2020 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2021 TEFRA Survey Scores	
Measure 3.2c	Survey-based of Pre-TEFRA vs. Post-TEFRA: Urgent care (Comparing health care before and since enrolling in TEFRA)	25.0%	5.3%	23.1%	7.6%	23.1%	5.1%	23.1%	5.8%
		Significantly different between Pre-TEFRA vs. Post-TEFRA 2018 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2019 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2020 TEFRA Survey Scores		Significantly different between Pre-TEFRA vs. Post-TEFRA 2021 TEFRA Survey Scores	
Measure 4.1a	Survey-based: Premium barriers (A big financial burden)	11.2%	N/A	8.7%	N/A	8.2%	N/A	7.2%	N/A
		Not significantly different between 2019 vs. 2018 TEFRA Survey Scores				Not significantly different between 2020 vs. 2018 TEFRA Survey Scores		Significantly different between 2021 vs. 2018 TEFRA Survey Scores; Not significantly different between 2021 vs. 2020 TEFRA Survey Scores	
Measure 4.1b	Survey-based: Premium ranges for premium barriers (A big financial burden by monthly TEFRA premium)	Due to small number of responses, reporting descriptive statistics for highest percentage of survey responses, 25.9%, marked "A big financial burden", with $281 - $328 TEFRA premium range during 2018 and shifted during 2019 to $364 - $416 TEFRA premium range of 21.1% survey response rate. Survey responses marked highest percentage of "A big financial burden" transitioned back to $281 - $328 TEFRA premium range during 2020 at 27.3%. Lastly to a lower TEFRA premium range of $208 - $250 during 2021 at 23.5% for "A big financial burden".							

Measure 4.2a	Survey-based: Reasons why cases closed	From the 2018 TEFRA Disenrollee Survey, the top five closure reasons of a child's TEFRA case were: 1) "No longer eligible" (40 respondents), 2) "Other" (39 respondents), 3) "Could not afford premium payment" (17 respondents), 4) "TEFRA services no longer needed" (14 respondents), 5) "Could not complete paperwork on time", and "Obtained other coverage" (tie with 8 respondents each). TEFRA-like closure data identified the top five closure reasons of a child's TEFRA case across all three years of 2018 - 2020. The top reason TEFRA-like beneficiary cases closed was "eligible another category" (i.e., 2nd highest reason in 2018 at 32 cases, highest reason in 2019 at 119 cases, 2nd highest reason in 2020 at 103 cases).		
Measure 4.2b	Survey-based: Getting care quickly for disenrollees (Obtaining care right away for an illness/injury/condition)	83.3% (TEFRA Disenrollee)	97.0% (TEFRA) 97.1% (ARKids First A) 92.2% (ARKids First B)	Not significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA, 2017 ARKids First A & 2018 ARKids First B Survey Scores
	Survey-based: Getting care quickly for disenrollees (Obtaining care when wanted, but not needed right away)	84.6% (TEFRA Disenrollee)	92.6% (TEFRA) 90.2% (ARKids First A) 87.5% (ARKids First B)	Not significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA, 2017 ARKids First A & 2018 ARKids First B Survey Scores
Measure 4.2c	Survey-based therapy services for disenrollees: Speech	62.2% (TEFRA Disenrollee)	88.5% (TEFRA)	Not significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA Survey Scores
	Survey-based therapy services for disenrollees: Occupational	50.0% (TEFRA Disenrollee)	89.1% (TEFRA)	Significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA Survey Scores
	Survey-based therapy services for disenrollees: Physical	52.2% (TEFRA Disenrollee)	91.2% (TEFRA)	Not significantly different between 2018 TEFRA Disenrollee vs. 2018 TEFRA Survey Scores
Measure 4.2d	Survey-based: Medical services not received for disenrollees	From the 2018 TEFRA Disenrollee Survey, the top responses for medical services not received for disenrollee were: 1) "Other" (31.5%), 2) "Special therapy" (22.8%), 3) "Prescription medicine" (12.0%), and 4) "Visits to a specialist" (10.9%)		

Appendix E. CMS-approved Evaluation Design

ARKANSAS TEFRA-LIKE
Section 1115
Project Number 11W001636

Evaluation Design

July 26, 2019

ARKANSAS DEPARTMENT OF HUMAN SERVICES

Table of Contents

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

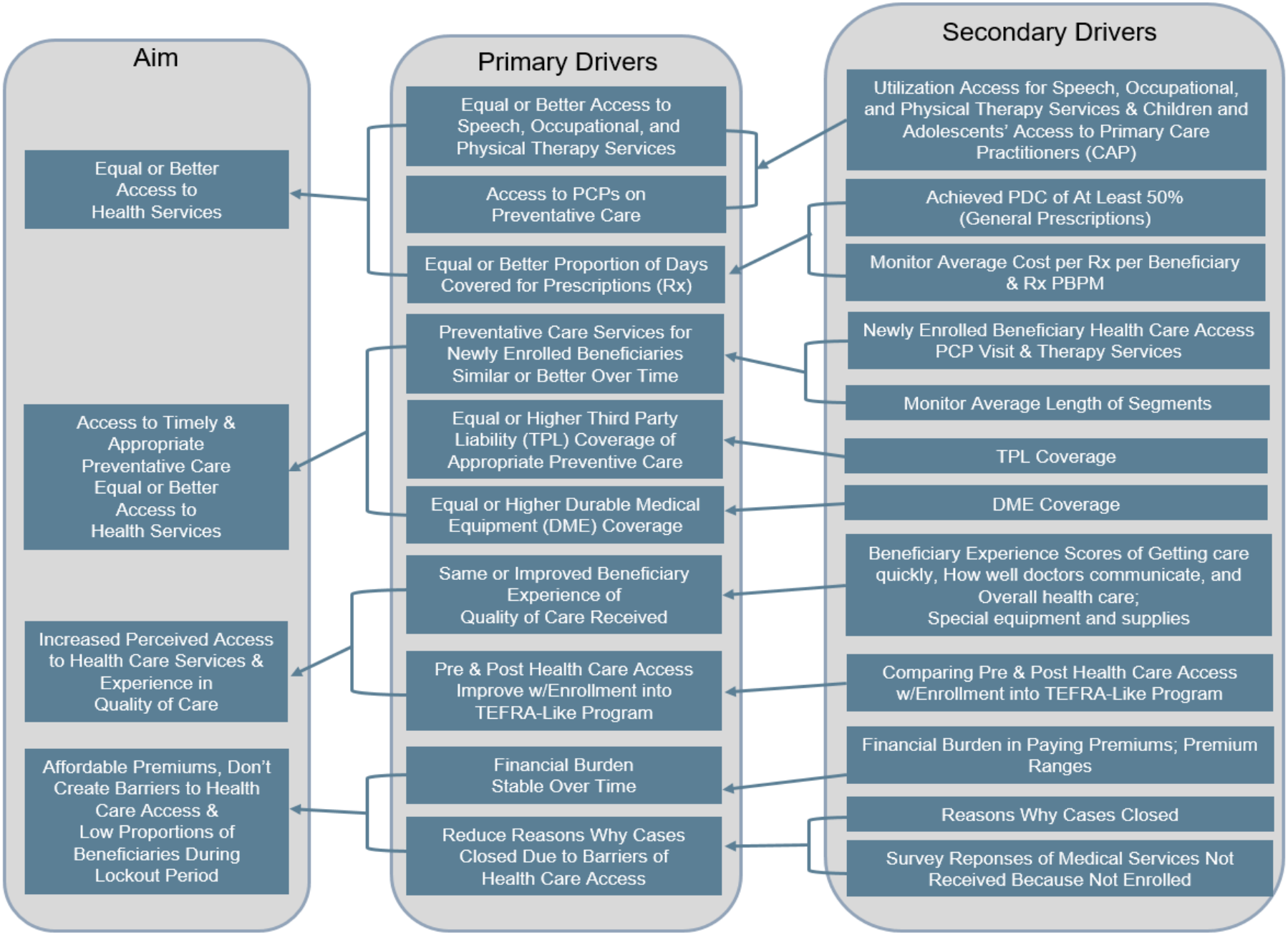
Appendix B. Four Goals with Evaluation Hypotheses and Drivers

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**