DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop: S2-01-16
Baltimore, Maryland 21244-1850

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICAID & CHIP SERVICES

State Demonstrations Group

Ms. Nancy Smith-Leslie
Director
Medical Assistance Division
New Mexico Human Services Department
P.O. Box 2348
Santa Fe, NM 87504

AUG 18 2017

Dear Ms. Smith-Leslie:

The Centers for Medicare & Medicaid Services (CMS) is approving the requested updates to New Mexico's evaluation design for the section 1115 demonstration, entitled "Centennial Care," Project Number 11-W-00285/6. The updates removed quality metrics that lacked data sources from the evaluation design.

You may now post the enclosed updated evaluation design on the state Medicaid website in accordance with federal requirements at 42 Code of Federal Regulations (CFR) §431.424(e). If you wish to extend the demonstration beyond the current approval period, the state must submit an interim evaluation report consistent with the approved evaluation design at the time of the extension request as outlined in 42 CFR §431.412(c)(2)(vi).

Your CMS project officer for this demonstration is Linda Macdonald. She is available to answer any questions regarding your section 1115 demonstration. Her contact information is:

Centers for Medicare & Medicaid Services
Center for Medicaid & CHIP Services
Mail Stop: S2-01-16
7500 Security Boulevard
Baltimore, MD 21244-1850
Telephone: (410) 7863872
Email: Linda.Macdonald@cms.hhs.gov

Please send any official communication regarding program matters simultaneously to Mr. Bill Brooks, Associate Regional Administrator for the Division of Medicaid and Children's Health in the Dallas Office. Mr. Brooks contact information is as follows:

Mr. Bill Brooks
Associate Regional Administrator
Centers for Medicare & Medicaid Services

Division of Medicaid and Children's Health Operations Program
1301 Young St., Ste. 833
Dallas, TX 75202

We look forward to continuing to partner with you and your staff on the Centennial Care section 1115 demonstration.

Sincerely,

[redacted]

Kim Howell
Director
Division of State Demonstrations and Waivers

Enclosure

cc: Ms. Ruth Hughes, CMS Chicago Region VI
Ford Blunt, New Mexico State Lead, CMS Dallas, Region VI

State of New Mexico
Human Services Department

Evaluation Design Plan
for Centennial Care Demonstration Waiver

May 18, 2017

HUMAN SERVICES
DEPARTMENT
MEDICAL ASSISTANCE DIVISION

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Centennial Care Demonstration Evaluation Design Plan

I. Background on Centennial Care

In July 2013, the Centers for Medicare & Medicaid Services (CMS) approved the New Mexico Human Services Department's (HSD's) request for Centennial Care, a new Medicaid Section 1115 demonstration waiver. Centennial Care will consolidate nine waiver programs into a single, comprehensive managed care delivery system with four managed care organizations (MCOs). The mission for Centennial Care is to educate Medicaid participants to become more savvy health care consumers, promote more integrated care, deliver proper care coordination for participants, involve participants in their own wellness, and pay providers for outcomes. CMS approved this waiver for an initial demonstration period from January 1, 2014, through December 31, 2018.

Populations Covered

Centennial Care will cover most of New Mexico's Medicaid and Children's Health Insurance Program (CHIP) beneficiaries. Table 1 describes the populations that will enroll in Centennial Care.

Table 1. Centennial Care Populations

New Mexico Centennial Care Waiver Demonstration Groups	Description	Federal Poverty Level (FPL)
Childless Adults	Childless adults aged 19-65 years with low income	Below Exchange subsidy eligibility level
Parents	Parents aged 19-65 years with low income	Below Exchange subsidy eligibility level
Pregnant Women	Pregnant women (includes presumptive eligibility) with low income, pregnancy-related services	Below 185% of the FPL
Individuals in the Family Planning Program	Family planning services only	Below Exchange subsidy eligibility level
Women in the Breast and Cervical Cancer Program	Breast and cervical cancer program services only	Below Exchange subsidy eligibility level
Children with Low Income	Children up to age 19 with low income	Below 138% of the FPL
Qualified Children	Children above 138% of the FPL up to age 19	Between 138%-185% of the FPL
CHIP Participants	Uninsured children above 185% of the FPL up to age 19	Between 185%-235% of the FPL
Foster Children	Former foster children up to age 26 who were on Medicaid while in foster care	N/A
Aged, Blind, and Disabled (ABD) Supplemental Security Income (SSI) Recipients	Individuals receiving SSI	Federal SSI standard

New Mexico Centennial Care Waiver Demonstration Groups	Description	Federal Poverty Level (FPL)
Medically Needy ABD	Individuals who are aged, blind, or disabled and spend down to below the SSI standard	Federal SSI standard
Working Individuals with Disabilities	Individuals with disabilities above the SSI standard	250% of the FPL
Nursing Facility Residents	Individuals not otherwise eligible for Medicaid who meet nursing facility level of care (LOC) criteria and reside in nursing facilities	300% of SSI standard
Community Benefit	Individuals not otherwise eligible for Medicaid who meet nursing facility LOC criteria and reside in the community (includes those electing self-directed services [Mi Via])	300% of SSI standard

The following coverage groups are excluded from the Centennial Care 1115 demonstration waiver:

- Qualified Medicare beneficiaries
- Specified low-income Medicare beneficiaries and qualified individuals
- Qualified disabled working individuals
- Non-citizens only eligible for emergency medical services
- Program for All-Inclusive Care for the Elderly (PACE) participants
- Individuals residing in intermediate care facilities for mental retardation
- Developmental disability waiver participants for home and community-based services (HCBS)

Native Americans who meet nursing facility level of care (LOC) or who are dually eligible for Medicare and Medicaid are required to participate in Centennial Care. Other Native Americans may choose to participate in Centennial Care, or they may choose to access Medicaid benefits through the fee-for-service delivery system.

Benefits

Centennial Care will provide a full range of physical health, behavioral health, and long term services and supports (LTSS), including HCBS and institutional care. Participants will receive comprehensive benefits that are at least equal in amount, duration, and scope to those available in the Medicaid State Plan. The program design consolidates existing delivery system waivers into a single, comprehensive managed care product. The demonstration will include services previously offered under the following waivers:

- Salud! 1915(b) waiver: acute managed care for children and parents

- CoLTS 1915(b)(c) waivers: managed LTSS for dual eligibles and individuals with a nursing facility LOC
- Behavioral health 1915(b) waiver: managed behavioral health services through a statewide behavioral health organization
- Mi Via-nursing facility 1915(c) waiver: self-directed HCBS
- AIDS 1915(c) waiver: HCBS for people living with HIV/AIDS

Centennial Care also provides some new and/or enhanced benefits, including:

Care Coordination

Care coordination will be a key Centennial Care benefit. Each MCO will perform an initial health risk assessment (HRA) for all participants. The HRA will determine the need for a Comprehensive Needs Assessment (CNA) which will determine the need for care coordination level 2 or 3. Individuals in care coordination levels 2 and 3 will be assigned to a care coordinator, who will develop, implement, and monitor a care plan. Individuals in care coordination level 2 will receive an annual comprehensive needs assessment to determine whether the care plan is appropriate and if a higher or lower level of care coordination is needed; individuals in level 3 will receive this assessment semi-annually.

Community Benefit

Centennial Care also expands access to LTSS by creating a comprehensive community benefit that includes personal care and HCBS benefits that will be accessible without the need for a slot for beneficiaries who are otherwise Medicaid eligible. Individuals who are not otherwise Medicaid eligible and meet certain criteria will also be able to access the community benefit if a slot is available.

Behavioral Health

Centennial Care adds three new behavioral health services:

- Recovery services
- Family support
- Respite for youth

Member Rewards Program

Centennial Care will offer a member rewards program that will provide incentives to individuals for participating in state-defined activities that promote healthy behaviors. Activities will include asthma controller medication compliance, annual recommended testing for diabetes, participation in a prenatal program, schizophrenia treatment compliance, bipolar disorder treatment compliance, osteoporosis management, and annual dental visits. Individuals participating in these activities will earn credits that may be used for health-related items.

II. Evaluation Design Requirements

CMS requires evaluations of all Section 1115 waiver demonstrations. The first step in the evaluation process is to develop and submit an evaluation design plan for CMS approval. CMS regulations require the design plan to include the following elements (42 C.F.R. §431.424):

- Discussion of the demonstration hypotheses
- Description of the data that will be utilized and the baseline value for each measure
- Description of the methods of data collection
- Description of how the effects of the demonstration will be isolated from other changes occurring in the state
- Proposed date by which a final report on findings from activities conducted under the evaluation plan must be submitted to CMS
- Any other information pertinent to the state's research

The special terms and conditions of the Centennial Care waiver further specify that the design plan include descriptions of the following components:

- Research questions and hypotheses
- Study design
- Study population
- Outcome measures
- Data collection
- Data analysis
- Timeline
- Evaluator

HSD submits this report as its evaluation design plan for CMS approval.

III. Goals and Guiding Principles

Centennial Care is driven by the following goals, which will guide the evaluation plan:

1. Assuring that Medicaid recipients in the program receive the right amount of care, delivered at the right time, in the right setting
2. Ensuring that expenditures for care and services being provided are measured in terms of quality and not solely by quantity
3. Slowing the growth rate of costs, or "bending the cost curve," over time without cutting benefits or services, changing eligibility, or reducing provider rates
4. Streamlining and modernizing the Medicaid program in the State

New Mexico further articulated the following four guiding principles for the program:

1. Developing a comprehensive service delivery system that provides the full array of benefits and services offered through the State's Medicaid program
2. Encouraging more personal responsibility so that recipients become more active participants in their own health and more efficient users of the health care system
3. Increasing the emphasis on payment reforms that pay for performance rather than for the quantity of services delivered
4. Simplifying the administration of the program for the State, providers, and recipients where possible

IV. Evaluation Design Plan

Study Design

Because Centennial Care is multifaceted, with impacts on diverse segments of the New Mexico Medicaid population, the evaluation of Centennial Care will be an ongoing study that consists of both discrete and continuous elements. There are aspects of the program that have particular end goals that will need to be achieved early in the implementation of the program, which will then be monitored regularly to assure that they are maintained. Other aspects of the program reflect continual performance process and outcomes measurements as part of service delivery under Centennial Care.

As specified in the Special Terms and Conditions, research to measure and evaluate program performance should be of sufficient rigor to meet standards of peer-reviewed scientific journals. The contract evaluator shall be selected on demonstrated capacity to maintain these research standards. However, each element of the program measured and evaluated may require different research methodologies, some of which HSD can anticipate, and some which will be determined after discussion with the designated evaluation contractor.

Because of the complexity of the Centennial Care program, HSD has developed the following logic model to illustrate and specify causal relationships that can be measured both quantitatively and qualitatively. This illustration explains the input resources, participant activities, program outputs, and expected measured outcomes, for which HSD and the evaluation contractor would be responsible for collecting the quantitative and qualitative data. The sections following the discussion of the logic model then detail the sources for data and their collection methods, the specific research questions and hypotheses tested in the study design, a list of individual measures collected and their application to the questions and hypotheses, and finally a discussion of the analysis of data and the analytic techniques anticipated will be necessary.

Logic Model

The logic model in Figure 1 presents the inputs or resources available to Centennial Care, program activities, anticipated outputs, and the expected impacts of the program (short-, medium-, and long-term). The logic model illustrates the connections among the key inputs to Centennial Care, the activities and outputs engendered by these resources, and the expected outcomes of the activities, in relation to the goals of Centennial Care.

The key inputs include coordinated care from the MCOs; administrative oversight of Centennial Care from CMS and HSD; and the participation by enrollees, providers, and citizens. Activities include determination of the care coordination level for each participant and integrated access to high quality physical health, behavioral health, LTSS, and other Centennial Care benefits. The outputs are the products of those activities, which then lead to outcomes that effectuate the ultimate goals of Centennial Care: to improve access to care, enhance quality, control costs, and streamline and modernize the delivery system.

Figure 1. Logic Model for Centennial Care Evaluation

Inputs	Activities	Outputs	Outcomes -- Impact		
			Short-Term	*Medium-Term*	*Long-Term*
Federal government – CMS State government – NM HSD MCOs Providers (including physical health, behavioral health, and LTSS) Enrollees NM citizens and advocacy groups	Enroll individuals in Centennial Care Determine care coordination level for each participant by assessing risks and health needs Improve access to physical health, behavioral health, and LTSS by providing care coordination and Patient-Centered Medical Homes Integrate care across physical health, behavioral health, and LTSS by giving MCOs full responsibility for all services Ensure quality of services delivered under Centennial Care to Medicaid recipients and their providers through monitoring and incentive systems Improve infrastructure to streamline health service delivery	Care coordinators have responsibility and knowledge of individual participants Participants have improved access even when their health needs are complex, requiring physical health, behavioral health, and LTSS services Providers have responsible point of contact for clients' needs and can obtain necessary supports Providers receive better compensation for delivering quality services Citizens and advocates receive better value for Medicaid expenditures	Participants access to appropriate high-quality physical health, behavioral health, and LTSS Continuity of care for participants across the spectrum of services and the duration of their needs Efficient provider credentialing Improved claims adjudication Improved grievance and appeals processing	Appropriate utilization of outpatient, inpatient, institutional, and HCBS services Effective and wide-spread use of electronic health records and telemedicine Provider network adequacy across all domains of service (physical health, behavioral health, and LTSS) Satisfaction among all providers of care (physical health, behavioral health, and LTSS) Participant satisfaction	Improved overall health status for Centennial Care participants Decline in growth rate of Medicaid expenditures Health service provider payment reform Delivery system reform

The data sources and collection methods, research hypotheses, and measures are based in part on finding ways to test the causal relationships predicted by this logic model.

Data Sources and Collection

The evaluation will draw on multiple data sources depending on the research question, variable being measured, and population. The study will require both individual-level and aggregate measures of relevant utilization, expenditures, health status, and other outcomes. These data sources include:

- **The New Mexico Medicaid Management Information System (MMIS)**. The MMIS contains information about enrollment, providers, and claims/encounters for health services. HSD has revised and improved its information technology systems for the collection of encounter data from the MCOs, validating the quality of the data exchanged with the MCOs, and requiring that payment to providers be included among the encounter data fields. Encounter data, in measuring each participant's interaction with the health care system, will underlie many of the measures of cost and utilization of particular services by individual participants. Detailed data on participant characteristics maintained in the MMIS will allow particular analyses to be stratified by participants' demographic and health service use characteristics. The MMIS system will be used to generate specific reports required by the evaluator. Claim/encounter lag time will depend on the type of service and service provider.
- **Healthcare Effectiveness Data and Information Set (HEDIS).** HEDIS is a nationally-recognized system for the measurement and reporting of health plan performance. HEDIS requires input of high quality encounter and enrollment data to construct comparison groups based on specific clinical criteria, as defined by diagnosis and procedure codes, and demographic characteristics such as age. Because HEDIS measures typically require the accumulation of data over at least one year to establish a baseline measurement, HEDIS reports for Centennial Care will not be available until July 2016. In the interim, HSD has contracted with an External Quality Review Organization (EQRO) to conduct HEDIS-like measures. The MCOs will provide the EQRO with administrative claims and encounter data, as well as supplemental data bases and medical record review data as allowed by HEDIS technical specifications. The EQRO will audit and validate the data provided by the MCOs and perform reports on the measures.
- **Consumer Assessment of Health Plans Survey (CAHPS).** CAHPS is a national, standard survey instrument that will be administered to representative samples of the Centennial Care population to measure patient access and plan satisfaction. The data collected from CAHPS will be used to assess measures of satisfaction with participants' personal physicians, health care experience as a whole, provider communication, and customer service.

- **HRAs.** The Centennial Care MCOs will perform HRAs on all new enrollees. Although the specific HRA instruments will not be uniform across MCOs, the MCO contracts prescribe minimum requirements for the HRA questions. The care coordination level assigned to the participant through the HRA will be reported to the MMIS, which will allow for some control and comparison of measures by levels of severity of chronic conditions.
- **CMS 416 Report**. The CMS 416 is the state's annual report to CMS on Medicaid children's utilization of Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) services. This report includes the number of children who receive health screening services, referrals for corrective treatment, and dental services. States report both the expected number of screening services given the number of children enrolled, and the number of services delivered. These data are used to calculate the state's screening ratio by age group. This data source can be used to measure the number of children who access care.
- **MCO-Specific Reports.** HSD's contracts with the MCOs require the plans to submit extensive reports on multiple aspects of plan operations, participant and health care provider activity, specialized services, care coordination, comprehensive needs assessments, health risk assessments, service plans, utilization management, quality, systems availability, claims management, provider satisfaction, and financial management. Many of these reports will supply information that answers research questions and provides or supplements the measures used to test research hypotheses. Although all participating MCOs must meet reporting requirements, there will be no independent validation of the content of the reports, with the exception of the audited HEDIS, CAHPS, and financial reports. Hence, these reports will be used to supplement information from the main analytic data sources. HSD is providing the MCOs with detailed specifications and uniform templates for reporting.

Research Questions and Hypotheses

Given the previously stated goals of the demonstration, hypotheses and research questions are necessary to assess whether Centennial Care is achieving its purposes. Each of these goals is operationalized through specific measures found later in the evaluation plan.

Goal 1. Assure that Medicaid beneficiaries in the demonstration receive the right amount of care, delivered at the right time, in the right setting. The design of the program seeks to eliminate programmatic silos through the consolidation of several waiver programs.

Hypothesis 1. Centennial Care's managed care design will deliver greater access in an appropriate and timely fashion.

Research Questions:

A. Has Centennial Care impacted access to care for all populations and services covered under the waiver, including physical health, behavioral health, and LTSS services?
B. Is access to care timely?
C. Are care coordination activities meeting the goals of the right amount of care, delivered at the right time, in the right setting?

Goal 2. Ensure that expenditures for care and services being provided are measured in terms of quality and not solely by quantity. This goal is guided by the principle that health care services improve health status most efficiently through coordinated, efficacious care. Centennial Care seeks to provide high quality services and reduce preventable adverse events.

Hypothesis 2. Increased provision of care coordination will lead to improved care outcomes and a reduction in adverse events.

Research Questions:

A. Has quality of care improved under Centennial Care?
B. Is care integration effective?

Goal 3. Slow the growth rate of costs or "bend the cost curve" over time without cutting benefits or services, changing eligibility, or reducing provider rates. Measuring Centennial Care's progress toward this goal requires monitoring the impact of the expansion in Medicaid eligibility authorized under the Affordable Care Act (ACA), as well as determining whether improved care coordination results in a shift in spending towards more comprehensive services for individuals with chronic conditions and/or behavioral health needs and away from unnecessary and often costly service utilization by populations with lesser needs. Centennial Care's success in slowing cost growth by

rewarding participants who achieve certain health care goals will also need to be monitored.

Hypothesis 3. The rate of growth in program expenditures under Centennial Care will trend lower over the course of the waiver through lower utilization and/or substitution of less costly services

Research Questions:

A. To what extent did service utilization and costs increase or decrease due to the implementation of the Centennial Care Program for Medicaid/CHIP beneficiaries in New Mexico?
B. Has the member rewards program encouraged individuals to better manage their care?

Goal 4. Streamline and modernize the Medicaid program in the state. The consolidation of multiple waivers, benefits, and services into the Centennial Care program by itself will streamline New Mexico's Medicaid program. The hypothesis and research questions addressing this goal test whether this consolidation has substantive implications for the health care delivery system in the state, providers, enrollees, and the state administration.

Hypothesis 4. Streamlining through Centennial Care will result in improved health care experiences for beneficiaries, improved claims processing for providers, and efficiencies in program administration for the state.

Research Questions:

A. Are enrollees satisfied with their providers and the services they receive?
B. Are provider claims paid accurately and on time?
C. Has the state successfully implemented new processes and technologies for program management, reporting, and delivery system reform?

Measures

Table 2 presents the measures that will be used to determine whether each program goal has been achieved. This table describes the data source, National Quality Forum (NQF) number (where applicable), stratification categories, comparison groups, and frequencies for each measure. A number of criteria were used to select the measures, including their relevance to the goals and research questions, applicability to the populations affected, and feasibility of measurement using the data sources available to HSD and the evaluator.

Most measures may be performed for various demographic groups and populations of special interest. These include age, gender, race/ethnicity, county, geographic region (including rural, urban, and frontier), Native Americans opting in/opting out of Centennial Care, individuals with LTSS needs, individuals with behavioral health needs, coverage group (e.g., Medicaid expansion), and others identified by HSD and/or the evaluator. The measures are largely drawn from CMS' *Initial Core Set of Adult Health Care Quality Measures,*[1] CMS' *Initial Set of Children's Health Care Quality Measures*,[2] the Agency for Healthcare Research and Quality (AHRQ) *Prevention Quality Indicators,*[3] and AHRQ *Pediatric Quality Indicators.*[4] Other measures are specifically designed for unique aspects of Centennial Care.

[1] http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-%E2%80%93PM-Adult-Health-Care-Quality-Measures.html
[2] http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/CHIPRA-Initial-Core-Set-of-Childrens-Health-Care-Quality-Measures.html
[3] http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec.aspx
[4] http://www.qualityindicators.ahrq.gov/Modules/PDI_TechSpec.aspx

Table 2. Measures for Centennial Care Evaluation

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Goal 1. Assure that Medicaid beneficiaries in the program receive the right amount of care, delivered at the right time, in the right setting					
A. Has Centennial Care impacted access to care for all populations and services covered under the waiver, including physical health, behavioral health, and LTSS services?	Access to preventive/ambulatory health services among Centennial Care enrollees in aggregate and within subgroups	Similar to 1332	HEDIS /NCQA	MCO; demographic characteristics* (such as age, gender, race/ethnicity, geographic region (including rural, urban, and frontier), county)	Comparison to baseline; trending over time	Annual
	Mental health services utilization		HEDIS/NCQA	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Number of telemedicine providers and telemedicine utilization		MCO telehealth report	MCO; geographic region; service type (physical health, LTSS, and behavioral health)	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Number and percentage of people meeting nursing facility LOC who are in a nursing facility		MMIS and encounter data	MCO; demographic characteristics; care coordination level	Pre-Centennial Care compared to post Centennial Care; trending over time	Annual
	Number and percentage of people meeting nursing facility LOC who receive HCBS		MMIS and encounter data	MCO; demographic characteristics; care coordination level; self-directed population	Pre-Centennial Care compared to post Centennial Care; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Number and percentage of people with annual dental visit	1388	HEDIS/NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Enrollment in Centennial Care as a percentage of state population		MMIS and Current Population Survey	Demographic characteristics	Comparison to baseline; trending over time	Annual
	Number of Native Americans opting in and opting out of Centennial Care		MMIS	Demographic characteristics	Comparison to pre-Centennial Care; trending over time; comparison of opt-in v. opt-out population	Annual
	Number and percentage of participants who accessed a physical health, behavioral health, and LTSS service		MMIS and encounter data	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual
	Number and percentage of participants with behavioral health conditions who accessed any of the 3 new behavioral health services (respite, family support, and recovery)		MMIS and encounter data	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Number and percentage of unduplicated participants with at least one PCP visit, in aggregate and among subgroups		MMIS and encounter data CMS Core Quality Measure for Children	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual
	Number/ratio of participating providers to enrollees		MCO network adequacy, PCP, and geographic access reports	MCO; provider type (PCP, etc.)	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Percentage of PCP panel slots open		MCO PCP report	MCO	Comparison to baseline; trending over time	Reported by MCOs monthly; evaluator may summarize to present annually
B. Is access to care timely?	Number and percentage of substance use disorder participants with follow-up 7 and 30 days after leaving residential treatment center (RTC) placement	Similar to 0576	MMIS and encounter data	MCO; demographic characteristics; participants leaving RTC placement	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Number and percentage of behavioral health participants with follow-up visit 7 days and 30 days after hospitalization for mental illness	0576	HEDIS /NCQA CMS Core Quality Measure for Adults and Children	MCO; care coordination level; demographic characteristics	Comparison to baseline; trending over time	Annual
	Childhood immunization status	0038	HEDIS /NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Immunizations for adolescents	1407	HEDIS /NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Well-child visits in first 15 months of life	1392	HEDIS/NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Well-child visits in third, fourth, fifth, and sixth years of life	1516	HEDIS /NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Adolescent well care visits		HEDIS /NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Prenatal and postpartum care: timeliness of prenatal care and percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery	1517	HEDIS/NCQA CMS Core Quality Measure for Adults and Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Frequency of ongoing prenatal care	1391	HEDIS/NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Breast cancer screening for women		HEDIS/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Cervical cancer screening for women	0032	HEDIS/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Flu vaccinations for adults	0039	CAHPS or MMIS claims and encounter data/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Initiation and engagement of alcohol and other drug dependence treatment	0004	HEDIS/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Geographic access measures		MCO network adequacy and geographic access reports	MCO; geographic regions	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
C. Are care coordination activities meeting the goals of right amount of care, delivered at the right time, in the right setting?	Number and percentage of participants with health risk assessments completed within contract timeframes		MCO care coordination report	MCO; demographic characteristics; self-directed population; care coordination level; population with behavioral health needs	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Number and percentage of participants who received a care coordination designation and assignment of care coordinator within contract timeframes		MCO care coordination report	MCO; care coordination level; demographic characteristics; self-directed population; population with behavioral health needs; geographic region	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Number and percentage of participants in care coordination level 2 that had comprehensive needs assessments scheduled and completed within contract timeframes		MCO care coordination report	MCO; care coordination level; demographic characteristics; population with behavioral health needs	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Number and percentage of participants in care coordination level 3 that had comprehensive needs assessments scheduled and completed within contract timeframes		MCO care coordination report	MCO; care coordination level; demographic characteristics; population with behavioral health needs	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Number and percentage of participants in care coordination level 2 who received in-person visits and telephone contact within contract timeframes		MCO care coordination report	MCO; care coordination level; demographic characteristics; self-directed population; population with behavioral health needs	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Number and percentage of participants in care coordination level 3 who received in-person visits and telephone contact within contract timeframes		MCO care coordination report	MCO; care coordination level; demographic characteristics; self-directed population; population with behavioral health needs	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Number and percentage of participants the MCO is unable to locate for care coordination		MCO unreachable members report	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Reported by MCOs monthly; evaluator may summarize to present annually

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Number and percentage of members transitioning from HCBS to a nursing facility; number and percentage of participants in nursing facilities transitioning to community (HCBS)		MMIS and encounter data	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual
Research Questions	**Measure**	**NQF Number**	**Data Source**	**Stratification Category**	**Comparison Groups**	**Frequency**
	Number and percentage of participants who refuse care coordination		MCO unreachable members report	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Reported by MCOs monthly; evaluator may summarize to present annually
	Goal 2. Ensure that expenditures for care and services being provided are measured in terms of quality and not solely by quantity					
A. Has quality of care improved under Centennial Care?	EPSDT screening ratio		CMS 416 report	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Monitoring for patients on persistent medications		HEDIS/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Medication management for people with asthma	1799	HEDIS/NCQA CMS Core Quality Measure for Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Asthma medication ratio	1800	HEDIS/NCQA	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Adult BMI assessment; weight assessment for children/adolescents	0024, 0421	HEDIS/NCQA CMS Core Quality Measure for Adults and Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Comprehensive diabetes care	0061, 0055, 0575, 0059, 0057, 0064, 0063, 0062	HEDIS/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Ambulatory care sensitive (ACS) admission rates (AHRQ Prevention Quality Indicators):diabetes short- and long-term complications, uncontrolled admission rates	0274, 0272, 0638	MMIS and encounter/AHRQ CMS Core Quality Measure for Adults	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual

	ACS admission rates (AHRQ Prevention Quality Indicators): COPD or asthma in older adults; asthma in younger adults	0275, 0283	MMIS and encounter/AHRQ CMS Core Quality Measure for Adults	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual
	ACS admission rates (AHRQ Prevention Quality Indicators): hypertension	Similar to 0709	MMIS and encounter/AHRQ	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual
	ACS admission rates (AHRQ Pediatric Quality Indicators):pediatric asthma	0283	MMIS and encounter/AHRQ	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual
	Number and percentage of emergency department (ED) visits that are potentially avoidable[5]		MMIS and encounter	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual

[5] One widely used methodology for classifying ED visits is the algorithm developed by researchers at the New York University Center for Health and Public Service Research. This algorithm is available for free and may be downloaded from: http://wagner.nyu.edu/faculty/billings/nyued-download.

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Smoking and tobacco use cessation	0027	HEDIS/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Number of critical incidents by reporting category (abuse, neglect, exploitation, environment hazard, emergency services, law enforcement, elopement/missing, and death)		MCO critical incidents report	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Monthly
	Antidepressant medication management	0105	HEDIS/NCQA CMS Core Quality Measure for Adults	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Inpatient admissions to psychiatric hospitals and RTCs		MMIS and encounter	MCO; demographic characteristics; populations of special interest	Comparison to baseline; trending over time	Annual
	Percentage of nursing facility residents who transitioned from a low nursing facility to a high nursing facility		MMIS and encounter	Demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Percentage of members aged 65 years and older who have had a fall or problem with balance in the past 12 months who were seen by a practitioner in the last 12 months and who have received a fall risk intervention)	0035	HEDIS/NCQA	Demographic characteristics	Comparison to baseline; trending over time	Annual
Research Questions	**Measure**	**NQF Number**	**Data Source**	**Stratification Category**	**Comparison Groups**	**Frequency**
B. Is care integration effective?	Percentage of population accessing a behavioral health service that received a PCP visit in the same year		MMIS and encounter data	MCO; demographic characteristics; participants diagnosed with a behavioral health condition	Comparison to baseline; trending over time	Annual
	Percentage of population accessing an LTSS service that received a PCP visit in the same year		MMIS and encounter data	MCO; demographic characteristics; participants diagnosed with a behavioral health condition	Comparison to baseline; trending over time	Annual
	Percentage of population accessing an LTSS service that also accessed a behavioral health service in the same year		MMIS and encounter data	MCO; demographic characteristics; participants diagnosed with a behavioral health condition	Comparison to baseline; trending over time	Annual
	Percentage of population with behavioral health needs with an ED visit by type of ED visit		MMIS and encounter data	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

	Percentage of population with LTSS needs with an ED visit by type of ED visit	Similar to 0173	MMIS and encounter data/CMS	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Percentage of population at risk for nursing facility placement who remain in the community		MCO care coordination report	MCO; demographic characteristics	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Number and percentage of participants who accessed a behavioral health service that also accessed HCBS		MMIS and encounter data	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Number and percentage of participants that: a. Maintain their care coordination level/LOC b. Move to a lower care coordination level/LOC c. Move to a higher care coordination level/LOC		MCO care coordination report and LOC report	MCO; demographic characteristics	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Percentage of population accessing a behavioral health service that received an outpatient, ambulatory visit in the same year		MMIS and encounter data	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

	Diabetes screening for people with schizophrenia or bipolar disorder who are using antipsychotic medications	1932	HEDIS/NCQA	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Diabetes monitoring for people with diabetes and schizophrenia	1934	HEDIS/NCQA	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Goal 3. Slow the growth rate of costs or "bend the cost curve" over time without cutting benefits or services, changing eligibility, or reducing provider rates					
A. To what extent did service utilization and costs increase or decrease due to the implementation of the Centennial Care program for Medicaid/CHIP beneficiaries in New Mexico?	Total program expenditures		Audited MCO financial reports; encounter payment data	Total program; populations of special interest; demographic characteristics; domains of service; care coordination level; self-directed population; behavioral health population	Trending over time	Annual
	Costs per member		Audited MCO financial reports; encounter payment data	Total program; populations of special interest; demographic characteristics; domains of service; care coordination level; self-directed population	Trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Cost per user of services		Encounter payment data	Total program; populations of special interest; demographic characteristics; domains of service; care coordination level; self-directed population	Trending over time	Annual
	Utilization by category of service		MMIS and encounter	Populations of special interest; demographic characteristics	Trending over time	Annual
	Hospital costs		Encounter payment data; expenditures by category of services report	Populations of special interest; demographic characteristics	Trending over time	Quarterly
	Use of HCBS		Encounter payment data; MCO self-directed report	Domains of service; care coordination level	Trending over time	Quarterly
	Use of institutional care (skilled nursing facilities)		Encounter payment data; MCO facilities readmission report	Populations of special interest; demographic characteristics; care coordination level	Trending over time	Quarterly
	Use of mental health services		Encounter payment data; MCO utilization by category of services report; MCO expenditures by category of services report; MCO over/under utilization report	Populations of special interest; demographic characteristics	Trending over time	Quarterly

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Use of substance abuse services		Encounter payment data; MCO utilization by category of services report; MCO expenditures by category of services report; MCO over/under utilization report	Populations of special interest; demographic characteristics	Trending over time	Quarterly
	Use of pharmacy services		Encounter payment data; MCO utilization by category of services report; MCO expenditures by category of services report; MCO over/under utilization report	Populations of special interest; demographic characteristics	Trending over time	Quarterly
	Inpatient services exceeding $50,000[6]		Encounter payment data	Total program; populations of special interest; demographic characteristics; domains of service; care coordination level. Vendor to identify high cost diagnoses for monitoring	Trending over time	Annual

[6] This threshold may be adjusted after reviewing encounter data.

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Use of diagnostic imaging		Encounter payment data	Total program; populations of special interest; demographic characteristics; domains of service; care coordination level	Trending over time	Annual
	ED use		Encounter payment data	Total program; populations of special interest; demographic characteristics; domains of service; care coordination level	Trending over time	Annual
	All cause	Similar to 1768	MCO facilities readmission report/NCQA CMS Core Quality Measure for Adults	MCO; facility type; procedure code	Trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Inpatient mental health/substance services		Encounter payment data	Total program; populations of special interest; demographic characteristics; domains of service; care coordination level	Trending over time	Annual
B. Has the	**Members Receiving Rewards in Each Category, as a Percentage of those with Eligible Conditions:**					
Member rewards program encouraged individuals to	Asthma controller medication compliance (children)		MMIS and encounter data; MCO member rewards report	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
better manage their care?	Diabetes - annual recommended tests (A1C, LDL, eye exam, nephropathy exam)		MMIS and encounter data; MCO member rewards report	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual
	Prenatal program (earned when signing up for the MCO's program)		MMIS and encounter data; MCO member rewards report	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual
	Treatment adherence - schizophrenia		MMIS and encounter data; MCO member rewards report	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual
	Osteoporosis management in elderly women – females aged 65+ years		MMIS and encounter data; MCO member rewards report	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual
	Annual dental visit – adult		MMIS and encounter data; MCO member rewards report	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual
	Annual dental visit – child		MMIS and encounter data; MCO member rewards report	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual
	Number of members spending credits		Fulfillment vendor report on member rewards program activities	Populations of special interest; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Goal 4. Streamline and modernize the Medicaid program in the state					
A. Are enrollees satisfied with their providers and the services they receive?	Percentage of grievances with expedited resolution within 3 business days		MCO grievances and appeals report	MCO; populations of special interest	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Percentage of grievances resolved within 30 days		MCO grievances and appeals report	MCO; populations of special interest	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Percentage of appeals upheld		MCO grievances and appeals report	MCO; populations of special interest	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Percentage of appeals partially overturned		MCO grievances and appeals report	MCO; populations of special interest	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Percentage of appeals overturned		MCO grievances and appeals report	MCO; populations of special interest	Comparison to baseline; trending over	Reported by MCOs quarterly;

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
					time	evaluator may summarize to present annually
	Number and percentage of calls answered; answered within 30 seconds; call abandonment rate		MCO call center report	MCO	Comparison to baseline; trending over time	Reported by MCOs monthly; evaluator may summarize to present annually
	Number and percentage of participants in care coordination levels 2 and 3 satisfied with their care coordination		MCO grievances and appeals report	MCO; populations of special interest	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Rating of personal doctor	0006	CAHPS/NCQA CMS Core Quality Measure for Adults and Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Rating of health care	0006	CAHPS/NCQA CMS Core Quality Measure for Adults and Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	How well doctors communicate composite measure	0006	CAHPS/NCQA CMS Core Quality Measure for Adults and Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	Customer service composite measure	0006	CAHPS/NCQA CMS Core Quality Measure for Adults and Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
	Rating of specialist seen most often	0006	CAHPS/NCQA CMS Core Quality Measure for Adults and Children	MCO; demographic characteristics	Comparison to baseline; trending over time	Annual
B. Are provider claims paid accurately and on time?	Percentage of clean claims adjudicated in 30/90 days		MCO claims activity reports	Provider type: behavioral health, physical health, I/T/U, specialty pay provider	Comparison to baseline; trending over time	Reported by MCOs weekly; evaluator may summarize to present annually
	Percentage of claims denied		MCO claims activity reports	Provider type: behavioral health, physical health, I/T/U, specialty pay provider	Comparison to baseline; trending over time	Reported by MCOs weekly; evaluator may summarize to present annually
	Dollar accuracy rate		MCO claims payment accuracy reports	Claim type: inpatient hospital, behavioral health, nursing facility, I/T/U, crossover, HCBS, dental, FQHC/RHC	Comparison to baseline; trending over time	Reported by MCOs monthly; evaluator may summarize to present annually
	Percentage of grievances resolved on time		MCO grievances and appeals report	MCO	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
						summarize to present annually
	Percentage of provider appeals resolved on time		MCO grievances and appeals report	MCO	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually
	Provider satisfaction survey results		MCO provider satisfaction survey report	MCO	Comparison to baseline; trending over time	Annual
C. Has the state successfully implemented new processes and technologies for program management, reporting, and delivery system reform?	Number and percentage of providers using electronic health records/participating in the Health Information Exchange		MCO performance improvement project report	MCO	Comparison to baseline; trending over time	Annual
	Use of different care delivery models, such as number of health home participants		TBD once implemented	TBD once implemented	TBD once implemented	TBD once implemented
	Percentage of claims paid accurately		MCO claims payment accuracy reports	MCO	Comparison to baseline; trending over time	Reported by MCOs monthly; evaluator may summarize to present annually
	Use and outcomes of payment reforms, e.g.,		TBD once implemented	TBD once implemented	TBD once implemented	TBD once implemented

Research Questions	Measure	NQF Number	Data Source	Stratification Category	Comparison Groups	Frequency
	bundled rates for adult diabetes, pediatric asthma, and urban hospitals					
	Number and percentage of visits in compliance with electronic visit verification system[7] requirement		MCO electronic visit verification report	MCO	Comparison to baseline; trending over time	Reported by MCOs monthly; evaluator may summarize to present annually
	Adoption of electronic case management/care coordination system by MCOs		MCO care coordination report	MCO	Comparison to baseline; trending over time	Reported by MCOs quarterly; evaluator may summarize to present annually

*Demographic characteristics include: age, gender, race/ethnicity, county, and geographic region (including rural, urban, and frontier).

**Populations of special interest include: Native Americans opting in/opting out of Centennial Care, individuals with LTSS needs, individuals with behavioral health needs, coverage group (e.g., Medicaid expansion), children in foster care, individuals with HIV/AIDS, and others identified by HSD/evaluator.

[7] The electronic visit verification system monitors receipt and utilization of community benefit services.

Data Analysis

A major concern for planning analysis within evaluation research and scientific study design is whether the effects of an intervention can be separated from other activities and external influences that may affect the measured outcomes of that intervention. External changes that may affect Centennial Care performance include:

- Economic trends, such as changes in employment and/or inflation
- Introduction of new medical care standards or technology, e.g. a new pharmaceutical protocol for behavioral health issues
- Epidemiology of disease patterns, such as a flu epidemic
- Expected increased enrollment in the program, bringing new populations into the Centennial Care delivery system
- Simultaneous implementation of other physical health, behavioral health, and HCBS models
- Changes in case-mix (e.g., relative severity of illness) as Centennial Care consolidates services and expands care for newly-enrolled populations
- State and/or federal policy changes

Any external changes beyond the control of the Centennial Care program make isolating the effects of Centennial Care more difficult. As a preliminary stage, a qualitative environmental survey, conducted with the assistance of HSD and other state agencies, would identify policy changes and other economic and technological trends of potential impact. The evaluator would consult with interest groups in communities of concern to identify other health and social service initiatives that may affect the outcomes. This qualitative analysis would attempt to assess the counterfactual, i.e., would the changes (or absence of changes) observed in the relevant measures have occurred without the Centennial Care program? Can those changes be explained by the causes suggested in a systematic survey of alternatives? If not, then the analysis can conclude that the Centennial Care program had an impact, although the value of that impact might not yet be quantifiable at this stage.

Quantifying the impact is further complicated because Centennial Care is being implemented state-wide. This means that individuals cannot be randomly assigned to Centennial Care, with others remaining in the existing program as controls. Without random assignment, other research designs can be used, but are less able to separate and distinguish program effects from the simultaneous effects of external impacts. Multiple regression techniques can be used to isolate the effects of non-random differences in characteristics that influence outcomes from the effects of the program itself. For example, because Native Americans can choose whether to participate in Centennial Care, the effects of the Centennial Care program on the health of Native American populations in the state allow for a comparison between non-random control groups. Because those Native Americans who choose to join the program may differ from those who choose not to join the program, observed differences between the two

groups might be caused by the non-random selection into Centennial Care. The analytical model would need to examine the characteristics of Native American Centennial Care participants and determine how they differ from those Native Americans who did not join and elected to receive services through the fee-for-service program.

However, multiple regression approaches would need to acknowledge that unmeasured characteristics of the joiners and non-joiners could explain differences in outcomes. Alternatively, a sample of joiners and non-joiners could be selected based on a propensity scoring model, matching enrollees who chose to opt out with enrollees who chose to opt in on their predicted propensity to join the program. The propensity score would be based on a multivariate probit regression model, which would generate an estimated probability for each individual enrollee to either join or not join Centennial Care. Cases and controls would then be matched on their predicted probability scores, and further multivariate modeling would then test the effects of the Centennial Care interventions.

To measure program effects for populations that cannot be separated into case and control groups, an interrupted time-series analysis is suitable for those program measurements that are frequently repeated and can be measured prior to the initiation of Centennial Care in 2014. An example is financial measurements, including total program costs and costs per capita, for enrollees as a whole and for particular subgroups. The selected evaluator would obtain access to financial data from HSD and/or the MCOs related to their operational and service costs prior to implementation of Centennial Care.

Other measures, such as those affecting newly enrolled individuals and populations, can be used only to assess change from the baseline measurement year of 2014. Although Centennial Care could compare its results on instruments such as CAHPS and HEDIS to national benchmarks, Centennial Care will only be able to monitor its progress after baseline measures are established during the first year of operation. Without the opportunity to measure characteristics and status before the intervention, this is the weakest design in terms of controlling for other causal influences. However, assuming that all participants of a study group experience the same external causal influences along with enrollment in Centennial Care, the environmental scan previously described would inventory potential external causes and qualitatively assess their relative importance in affecting the measured outcomes.

V. Next Steps: Evaluator and Timeline

HSD will issue a request for proposals (RFP) for an independent evaluator to conduct the evaluation described in this report. Once awarded, HSD will provide CMS with a description of the evaluator's qualifications, the contract award amount, and other pertinent information. The following outlines HSD's draft timeline, as specific dates might change, depending on CMS' approval of this design:

- Submission of evaluation design to CMS – December 9, 2013

- Final CMS approval of evaluation design – TBD
- Issue RFP and award evaluation contract – First quarter of 2014
- Evaluation updates to CMS – Quarterly and annual reports, as required in the Special Terms and Conditions
- Interim evaluation report – Submitted with waiver application renewal
- Final evaluation report- Submitted 120 days following waiver expiration

HSD requests flexibility in the proposed design plan, as unanticipated events, policy changes, and the eventual evaluation contractor may impact the evaluation design.