

PROTOCOL ACTIVITY	HOW THE PROTOCOL IS IMPLEMENTED
STEP 1: STUDY TOPIC	
<p>1.1 Select topic through data collection and analysis of comprehensive aspects of enrollee-member¹ needs, care and services.</p>	<p>AHCCCS has established a process for selection of clinical and non-clinical focused topics for Performance Improvement Projects (PIPs), based on the Centers for Medicare and Medicaid Services (CMS) protocol for the Implementation of Performance Improvement Projects (PIPs). Project topics, and the performance indicators used to assess each project, are identified through data collection and analysis of enrollee member needs, care and services. Topics are systematically selected and prioritized to achieve the greatest practical benefit for enrolled members. Selection of topics must take into account:</p> <ol style="list-style-type: none"> 1. The prevalence and potential consequences of a condition among, or the need for a specific service by, AHCCCS members 2. Member demographic characteristics and health risks, and 3. The interest of members, providers, AHCCCS and/or Centers for Medicare and Medicaid Services (CMS), in the aspect of care or services to be addressed. <p>Contractor input is sought in the selection of topics to ensure that enrollee-member needs, health risks, utilization data and delivery systems are considered in selecting topics.</p>
<p>1.2 Ensure that PIPs, over time, address a broad spectrum of key aspects of enrollee member care and services.</p>	<p>The selection of topics each year takes into account topics of PIPs already under way, as well as clinical studies or medical audits that have been conducted in recent years.</p>

¹ [Changed throughout policy](#)

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1.3 Ensure that PIPs, over time, include all enrolled populations; i.e., do not exclude certain enrollees members such as those with special health care needs.	At any given time, all enrolled populations of sufficient size are included in at least one mandated PIP. This includes enrollees-members with special health care needs, such as the ALTCS E/PD and DDD populations as described in Contract, as well as members who are dually enrolled with both Acute care Contractors and Children’s Rehabilitative Services. ²
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STEP 2: STUDY QUESTION(S)	
2.1 State study question(s) for each PIP clearly in writing.	The AHCCCS Clinical Quality Management Team, Quality Improvement Team and Data Analysis and Research (DAR) Unit develop the study question(s) and overall methodology for PIPs utilizing available data (State, Contractor, and National data relevant to the topic being studied), stakeholder and Contractors input, and external clinical resources —(such as relevant clinical literature, previous research, and community health care professionals). The methodology, including the study question(s), is reviewed by AHCCCS Administrators, including the Clinical Administrator and Chief Medical Officer. Contractor Medical Directors and Quality Management/Quality Improvement staff is also offered the opportunity to review and provide feedback. This extensive review process ensures that study questions are clearly defined and that any ambiguous wording in the methodology is corrected before it is finalized.
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STEP 3: STUDY INDICATOR(S)	
3.1 Develop objective, clearly defined, measurable indicators.	AHCCCS defines requirements for PIP design and —development, including study indicators, in the AHCCCS Medical Policy Manual (AMPM). As described above, PIP methodologies are reviewed extensively to ensure that the studies utilize objective, clearly defined and measurable indicators that are appropriate to the topic and purpose.

² [Removed – not needed](#)

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3.2 Ensure that indicators measure changes in health status, functional status, or enrollee <u>member</u> satisfaction, or processes of care with strong associations with improved outcomes:	Study indicators are designed to measure changes in health status, functional status, enrollee , <u>enrolleemember</u> satisfaction, or processes of care with strong associations linked to improved outcomes, according to the requirements for PIP methodology development specified in the AMPM.
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STEP 4: STUDY POPULATION	
4.1 Clearly identify all Medicaid enrollees-members to whom the study question(s) and indicators are relevant:	The study population is clearly identified in the PIP methodology.
4.2 Identify a data collection process to capture all <u>members</u> enrollees to whom the study questions apply:	Technical specifications, appended to the PIP methodology, specifically identify which <u>members</u> enrollees are to be included within the denominator (e.g., by Contractor identification number, contract type, etc.), for use by the AHCCCS Information Services Division (ISD) in writing program language to collect data from the Prepaid Medicaid Management Information System (<u>PMMIS</u>) or by the Office of Business Intelligence via the COGNOS data system.
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STEP 5: SAMPLING METHODS	

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5.1 Utilize a sampling technique that considers the true or estimated frequency of occurrence of the event, and specify the confidence interval to be used and the margin of error that will be acceptable.	Frequency of occurrence and margin of error are –estimated based on prior studies or published research. Confidence levels are selected at the medical standard of 95 percent. The PIP methodology specifies the confidence level/ confidence interval for the sample.
5.2 Ensure that the sampling technique(s) protects against bias:	Random sampling techniques are used to select each sample and thus protect against bias.
5.3 Ensure that the sample contains a sufficient number of members/enrollees .	Samples are selected to achieve a power of .80 or greater, and the appropriate inferential statistical tests are utilized.
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STEP 6: DATA COLLECTION PROCEDURES	
6.1 Clearly specify the data to be collected:	The PIP methodology specifies what data is to be collected in the Indicator Description, Indicator Criteria, Numerator and Denominator statements.
6.2 Clearly specify the source(s) of data:	The PIP methodology specifies the source(s) of data to be collected for each type of data. Potential sources of data may include administrative data, medical records, tracking logs, results of provider interviews, and/or results of any AHCCCS member interviews/surveys. For example, enrollment data from the Pre-paid Medical Management Information System (PMMIS) Recipient Subsystem is used to identify members who meet sample frame (denominator) criteria. The methodology also may specify that diagnosis or encounter data from the Encounter Subsystem are used to further identify members in the denominator.

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6.3 Specify a systematic method of collecting valid and reliable data that represents the entire population to which the study indicators apply.	The PIP methodology specifies data collection methods. If the entire population is not used in a study, a representative random sample is collected for the denominator.
6.4 Do instruments for data collection provide for consistent, accurate data collection over the time periods studied?	If a data collection tool is used, it is included as part of the PIP methodology. Such a tool would be used for baseline and successive measurements. In cases where Contractors collect additional numerator data for AHCCCS-mandated PIPs, AHCCCS provides a standardized instrument with detailed instructions for the Contractors to utilize and provides ongoing technical assistance during data collection. Contractors also are provided with a copy of the study methodology with any request(s) for PIP data.
6.5 Does the study design prospectively specify a data analysis plan?	The PIP methodology is developed prior to the collection of data and specifies an analysis plan, as well as the considerations for comparative analysis.
6.6 Are qualified staff and personnel used to <u>collecting the</u> data?	The AHCCCS Division of Health Care Management –(DHCM), Data Analysis and Research (DAR) Unit, and Quality Improvement Team employs qualified staff to collect and analyze data utilized in PIPs. In addition, AHCCCS reviews the qualifications of Contractor personnel involved in data collection and analysis for both Contractor-selected and AHCCCS-mandated PIPs.
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STEP 7: INTERVENTION AND IMPROVEMENT STRATEGIES	
7.1 Reasonable interventions are undertaken to address causes/barriers identified through data analysis and	Contractors must initiate interventions that result in significant improvement in performance for the quality indicators being measured. Interventions should be evidence-based, and directly related to causes and barriers identified. In addition to the Contractor’s analysis of data and selection/modification of interventions, AHCCCS

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Quality Improvement (QI) processes undertaken.	<p>facilitates analysis of causes and barriers, researches and recommends evidence-based interventions to Contractors. AHCCCS may require all Contractors participating in a PIP to collaboratively implement standardized interventions.</p> <p>Contractors must demonstrate how the improvement can be reasonably attributable to interventions undertaken by the organization (i.e., improvement occurred due to the project and its interventions, not another unrelated reason). Contractors' specific interventions, as identified in their PIP reports, are evaluated for effectiveness by AHCCCS.</p>
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STEP 8: DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS	
8.1 Analysis of findings is conducted according to the data analysis plan.	AHCCCS conducts an evaluation of PIP measurement results — overall, by Contractor and for any other stratifications identified in the methodology — using statistical analysis techniques defined in the data analysis plan section of the PIP methodology.
8.2 Results and findings present numerical data in a way that provides accurate, clear and easily understood information.	Using a statistical software program, numbers, percentages and overall rates for each indicator are produced for use in tables and graphs. Statistical tests (e.g., Pearson's chi square analysis) are applied. Tables, graphs and/or written analysis for each indicator reflecting rates overall, by Contractor and for any other stratifications identified in the methodology, are verified for accuracy and presented in an easily understood manner in reports produced by AHCCCS.
8.3 The analysis identifies initial and repeated measurements, statistical significance, factors that influence comparability of initial and repeat measurements, and factors that threaten internal and external	<p>Following the data analysis plan, AHCCCS identifies:</p> <ul style="list-style-type: none"> • Initial and repeat measurements of the prospectively identified indicators for the project, • Statistical significance of any differences between the initial and repeat measurements, • Factors that influence the comparability of initial and repeat measurements, <u>and</u> • Factors that threaten the internal or external validity of the findings.

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validity.	
<p><u>8.4</u> The analysis includes an interpretation of the extent to which the PIP was successful and follow-up activities.</p>	<p>The AHCCCS analysis and interpretation of study results is based on continuous quality improvement philosophies. It includes an interpretation of the extent to which the PIP was successful and any recommended follow-up activities.</p>
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STEP 9: EVALUATION OF “REAL” IMPROVEMENT	
<p>9.1 The same methodology as the baseline measurement is used, when measurement is repeated.</p>	<p>AHCCCS ensures that consistent methodology is used to conduct repeat measurements. As the delivery system evolves, potential impact to measurements or populations are notated in the study documentation as well as any official AHCCCS-produced report. Any variance is evaluated by a statistician to assess impact.</p>
<p>9.2 An analysis is conducted to determine if there are quantitative improvements in processes or outcomes of care.</p>	<p>AHCCCS utilizes baseline and repeat measures of quality indicators, tests of statistical significance calculated on baseline and repeat indicator measurements, and comparison with benchmarks specified by the agency or found in industry standards.</p> <p>AHCCCS requires Contractors to submit PIP re-measurement reports that discuss improvements in processes or outcomes of care. If demonstrable or sustained improvement in study indicators is not achieved, Contractors are to describe the probable reason(s) that improvement was not achieved, and identify proposed actions to revise, replace and/or initiate new interventions, along with the timeframe for implementing these activities.</p>

9.3 An assessment is made to determine if improvement in performance has face validity.	AHCCCS assesses whether an intervention appears to have been successful in improving performance; (i.e., whether improvement appears to have been the result of the planned intervention as opposed to some unrelated occurrence).
9.4 An analysis is conducted to determine statistical evidence of observed improvement.	Statistical tests are applied by AHCCCS. Variability of distribution will be calculated to determine appropriate methods of statistical analysis. Data variability will also determine if categorization of variables is possible and ensure data is reported appropriately (mean, median).
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STEP 10: SUSTAINED IMPROVEMENT	
10.1 Repeated measurements are conducted to determine sustained improvement.	AHCCCS conducts one or more re-measurements after the first re-measurement of performance is taken to ensure that improvement is sustained. Contractors demonstrate sustained improvement when they maintain, or increase, improvements in performance for at least one year after the improvement is first achieved. Because of random year-to-year variation, population changes, and sampling errors, performance on any given individual measure may decline in the second measurement. However, when all of the repeat measurements for a given project are taken together, this decline should not be statistically significant.