Texas External Quality Review
Annual Report
Fiscal Year 2005

Medicaid Managed Care
and
Children's Health Insurance Program

Prepared by

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Executive Summary

The purpose of this report is to provide a summary of the activities conducted to meet federal requirements for external quality review of Texas Medicaid Managed Care and the Children's Health Insurance Program (CHIP) for fiscal year 2005. The report also includes findings and recommendations to improve the process of external quality review and the quality of the health care and service provided to Medicaid and CHIP enrollees in Texas. The Institute for Child Health Policy (ICHP) at the University of Florida under contract as the Texas Medicaid and CHIP External Quality Review Organization (EQRO) to the Texas Health and Human Services Commission (HHSC) conducted this review.

This review is structured to comply with the Centers for Medicare and Medicaid Services' (CMS') federal guidelines and protocols and addresses care and service that Managed Care Organizations (MCOs), the Exclusive Provider Organization (EPO), and the Behavioral Health Organization (BHO) participating in the STAR, STAR+PLUS, CHIP, and NorthSTAR programs provide. ICHP also provides evaluation of certain aspects of care and service provided in the Medicaid Primary Care Case Management (PCCM) and Fee-for-Service (FFS) programs. External review is conducted primarily using administrative data, including claims and encounter data that are submitted directly to ICHP by the STAR MCOs and CHIP MCOs/EPO. The State provides data for STAR+PLUS and NorthSTAR to ICHP after receipt from the MCOs/BHO. Other evaluation activities include member surveys, review of documents submitted by the MCOs, medical record review, site visits and phone interviews with MCO management and staff, and phone calls to MCO member services and participating provider offices.

The quality of the MCOs' claims and encounter data is crucial to ICHP's external quality review activities. ICHP monitors the data quality with each monthly data submission and provides frequent, ongoing feedback to the participating MCOs and to the HHSC units about the quality of those data. In addition, ICHP conducts an annual review that includes certification and review of medical records for encounter validation. Using questionnaires, document review, site visits, and phone contacts, ICHP reviews MCO structure and processes used to provide care to Texas Medicaid and CHIP enrollees. Each MCO is assessed regarding their disease/care management programs, utilization review procedures, provider network development and turnover, data management capabilities, quality improvement projects, and elements important to continuous improvement.

Using the administrative data, ICHP calculates a range of performance measures that have been validated as addressing quality of care provided to managed care enrollees. The measures are primarily those included in the National Committee for Quality Assurance (NCQA) Health Plan Employer Data and Information Set (HEDIS®) measures and are used to address quality of care and service in the following categories:

1. Satisfaction with Care,
2. Use of Services,
3. Access/Availability of Care, and
4. Effectiveness of Care.

Detailed findings and recommendations were provided to HHSC in full technical reports for each external quality review activity conducted.

As a result of the external quality review activities conducted for fiscal year 2005 for Texas Medicaid and CHIP, ICHP has concluded:

- The data quality in the STAR MCO, STAR+PLUS, and CHIP programs is very good and continues to improve as evidenced by the Data Certification and Data Validation reports.

- Data quality is acceptable for calculating HEDIS® quality of care measures and also for use by HHSC in its rate setting work.
- MCOs participating in Texas Medicaid and CHIP demonstrate significant compliance with federal and state requirements for these programs and have in place the structure and processes needed to deliver quality care and service to enrollees.
- Overall, the quality of care in Texas Medicaid Managed Care and CHIP is also good, as evidenced by strong member survey scores and ongoing quality of care indicators.
- Where indicated, HHSC and the participating MCOs have identified opportunities for improvement in care and service.
- Specific recommendations for improvement based on some quality of care indicators and member survey results are contained in the body of the narrative.

Texas is implementing a Value Based Purchasing approach in Medicaid Managed Care and CHIP in September 2006. This approach will increase the interaction of participating MCOs and HHSC in defining goals for improvement and measuring success as the MCOs work to continuously improve. Results from ongoing external quality review provide a strong foundation for this move to continuous improvement.

Introduction

The goal for external quality review for Medicaid Managed Care and the Children's Health Insurance Program (CHIP) in Texas "is to continuously improve the health of Texans by:

- Monitoring the quality of care available;
- Monitoring consumer satisfaction;
- Monitoring provider satisfaction;
- Monitoring the accessibility of care for eligible recipients; and
- Measuring the performance of Medicaid managed care plans, including measuring comparability of quality, access, and cost-effectiveness of these plans."[1]

Federal regulations require external quality review of approved Medicaid Managed Care programs to ensure compliance with established standards.[2] Specifically, states with these programs are required to validate participating Managed Care Organizations' (MCOs') performance improvement projects, validate MCO performance measures, and assess MCO compliance with member access to care and quality of care standards. In addition, states can choose optional evaluation activities, which may include validation of client level data, consumer or provider surveys, externally-conducted focus studies or performance improvement projects, and calculation of performance measures in addition to those produced by the MCOs. The Centers for Medicare and Medicaid (CMS) has provided guidance for these mandatory and optional activities through protocols[3] established to assist in evaluating the State's quality assessment and improvement strategy.

External quality review in Texas is contracted to include ongoing evaluation of MCOs participating in:

- STAR – The "State of Texas Access Reform" or STAR Program provides Medicaid services through managed care in selected geographic areas in Texas. Services are provided to eligible enrollees either through one of eight MCOs or through Primary Care Case Management (PCCM). This program was implemented in 1993.
- CHIP – The Children's Health Insurance Program (CHIP) is designed for families whose income is too high to qualify for Medicaid yet cannot afford to buy private insurance for their children. CHIP provides eligible children with coverage for a full range of health services including regular checkups, immunizations, prescription drugs, lab tests, X-rays, hospital visits and more. Services are provided to eligible enrollees either through one of twelve MCOs or one Exclusive Provider Organization (EPO). The state plan for CHIP in Texas was approved for implementation in 1998.
- STAR+PLUS – STAR+PLUS is a pilot project which integrates acute health services with long-term care services using a managed care delivery system. STAR+PLUS is for Texans in Harris County who are elderly or who have a physical or mental disability and qualify for Supplemental Security Income (SSI) benefits or for Medicaid due to low income. The aims of STAR+PLUS are to 1) provide the appropriate amounts and types of services to help people stay as independent as possible, 2) serve people in the most community-based setting consistent with their safety, 3) improve care access, quality, and outcomes, 4) increase accountability for care, and 5) control costs. STAR+PLUS was implemented in 1998.
- NorthSTAR – NorthSTAR is a behavioral health managed care program providing an innovative approach to behavioral health service delivery including: 1) blended funding from state and local agencies, 2) integrated treatment in a single system of care, 3) care management, 4) data warehouse and decision support for evaluation and management, and 5) services provided through a fully capitated contract with a licensed behavioral health organization. NorthSTAR was approved by CMS in September of 1999 and implemented in November of 1999.

The Institute for Child Health Policy (ICHP) at the University of Florida (UF) has been the contracted Texas External Quality Review Organization (EQRO) since August 2002. ICHP is a unique, multi-disciplinary academic unit of the University of Florida. The ICHP faculty members maintain joint appointments in the College of Medicine Department of Pediatrics and the Department of Epidemiology and Health Policy Research. ICHP faculty and staff are engaged in multiple research and evaluation studies and policy and program initiatives throughout the College of Medicine, the UF Health Sciences Center, and nationally.

In fiscal year 2005, ICHP conducted the following activities to address the mandatory and optional external quality review functions for Texas Medicaid Managed Care and CHIP:

1. Ongoing Monitoring and Improvement of Data Quality
    a. MCO Data Submission (STAR, CHIP, STAR+PLUS, NorthSTAR)
    b. Data Quality Certification (STAR, CHIP, STAR+PLUS, NorthSTAR), and
    c. Encounter Data Validation (STAR, CHIP, STAR+PLUS)
2. Member Surveys (STAR, PCCM, STAR+PLUS)
    a. STAR and PCCM Adult Member
    b. STAR and PCCM Caregiver of Child Member
    c. STAR+PLUS Unmet Needs
3. Quarterly and Annual Quality of Care Chart Books (STAR, CHIP, STAR+PLUS, NorthSTAR, also includes results of measures calculated for PCCM and Fee-for-Service (FFS))
4. Quarterly and Annual Financial Performance Chart Books (STAR, CHIP, STAR+PLUS)
5. MCO Administrative Interviews (STAR, CHIP, STAR+PLUS, NorthSTAR)
6. Evaluation of MCO Performance Improvement Projects (STAR, STAR+PLUS, NorthSTAR)
7. Evaluation of MCO Annual Quality Improvement Program Summaries (STAR, CHIP, STAR+PLUS)
8. MCO Member Service and Provider Office Phone Calls (STAR, CHIP, STAR+PLUS)
9. Ad Hoc Reports (STAR, CHIP, STAR+PLUS, NorthSTAR – As Requested)

ICHP provided complete technical reports, including methodology and detail results, to the Texas Health and Human Services Commission (HHSC) for each activity summarized in this report. This report is organized in sections, which are described in the following paragraphs.

First, activities aimed at monitoring and improving the quality of the claims and encounter data are described. The quality of the MCOs' claims and encounter data is crucial to ICHP's external quality review activities. ICHP monitors the data quality with each monthly data submission and provides frequent, ongoing feedback to the participating MCOs and to the HHSC units about the quality of those data. In addition, ICHP conducts an annual review that includes certification and encounter validation.

The second section addresses the MCO structure and processes used to provide care to Texas Medicaid and CHIP enrollees. Each MCO is assessed regarding their disease/care management programs, utilization review procedures, provider network development and turnover, data management capabilities, quality improvement projects, and elements important to continuous improvement.

The third section of the annual report addresses the quality of care provided to Medicaid and CHIP enrollees in Texas using the following National Committee for Quality Assurance (NCQA) categories:

1. Satisfaction with Care,
2. Use of Services,
3. Access/Availability of Care, and
4. Effectiveness of Care.

The fourth section of the annual report describes health-based risk analysis conducted by ICHP to support HHSC in rate setting activities for STAR, STAR+PLUS, and CHIP. The final section provides lists of ad hoc reports produced for HHSC during the fiscal year.

Ongoing Monitoring and Improvement of Data Quality

The MCO and state claims and encounter data form the foundation for the external quality review. These data produce valid quality and performance measures in a cost-effective manner because these data are readily available and routinely collected. In addition, the use of administrative data reduces the burden on participating providers and MCOs because the amount of medical record review for quality assessment is greatly reduced. Administrative data also reduces the length of time from provision of care to measurement of that care. Traditional medical record reviews are time-consuming and can often delay the availability of quality of care findings for a year or more. Maintaining and improving the quality of the administrative data is an ongoing process involving the MCOs, the State, and the EQRO.

MCO Data Submission

On a monthly basis, ICHP monitors the quality of the claims and encounter data that the MCOs submit. This is done by 1) conducting a volume analysis to determine if the total claims are within an expected range and 2) evaluating the values in key data elements to ensure the number of unexpected values is limited to a small fraction (in most cases the requirement is less than one percent) of the total claims. If the claims data do not pass initial quality checks, ICHP directly contacts the MCO to report and resolve the issue. ICHP also maintains a record of important concerns in logbooks which document the files received, the date received, whether the quality assurance (QA) checks were passed, and any issues noted. These logbooks are sent to HHSC monthly and include requests for HHSC intervention with specific data quality issues as needed.

MCOs participating in STAR and CHIP submit data directly to ICHP. ICHP staff consistently addresses any issues identified during data submission and review, working with the MCOs to correct those issues as needed. Data for STAR+PLUS and NorthSTAR are submitted to the State and then state staff transmits those data to ICHP. ICHP provides feedback to the designated state contacts about potential data issues, which the state representatives communicate to the participating STAR+PLUS and NorthSTAR MCOs. As appropriate, and with HHSC approval, ICHP works directly with STAR+PLUS MCOs to address any data concerns.

Overall, the MCO data submissions are complete and accurate. During state fiscal year 2005, ICHP provided additional assistance to two MCOs in particular. In submission of data for fiscal year 2005, ICHP worked with Amerigroup to address issues with assignment of new provider identification numbers that were created during Amerigroup's changeover to a new data platform. The assignment of the new numbers affected ICHP's ability to assess and report ongoing measures for time frames that crossed the new implementation time period. ICHP asked HHSC to intervene when Amerigroup was not responsive in a timely manner to ICHP's request for a crosswalk between old and new provider numbers. The crosswalk was posted February 1, 2006.

ICHP also worked with Mercy Health Plan to address discrepancies between the paid amounts calculated from the fiscal year 2005 claims and encounter data and the paid amounts that Mercy reported to HHSC in their Financial Statistical Reports (FSRs). Mercy Health Plans noted that their submissions to ICHP were not accurate and resubmitted their data to correct the deficiency.

Data Quality Certification

The purpose of the data quality certification is to provide information about the quality of the encounter data for the STAR, CHIP, STAR+PLUS, and NorthSTAR programs in Texas for fiscal year 2005 based on analyses of the administrative data. Two documents were used to define procedures for certifying the encounter data: 1) Texas Statute 533.0131—Use of Encounter Data in Determining Premium Payment Rates and 2) CMS Final Protocol for Validating Encounter Data[4].

ICHP reported an assessment of the completeness and validity of the data. In addition, for STAR, CHIP, and STAR+PLUS, ICHP reported on the comparison of the paid amounts reported in the claims and encounter data to the amounts included in MCO-provided Financial Statistical Reports (FSRs). The name of each variable in the encounter data was presented in reports to HHSC, followed by the percent of the time the variable is missing and the percent of the time the variable does not match to a standard accepted list of valid information for the variable. Standard accepted lists of valid information were taken from a variety of sources including data dictionaries supplied by HHSC.

All of the MCOs were in compliance with the stated requirements for each field. For example, all MCOs in STAR, STAR+PLUS, and CHIP were compliant with the requirement that an enrollee identification number is present 100 percent of the time. Provider identification must be present 95 percent of the time and all MCOs were compliant. A principal diagnosis must be present and valid 90 percent of the time and all MCOs were in compliance. Eleven data elements are assessed, including the preceding examples, and all MCOs for all programs were compliant with the reporting requirements.

Based on these findings, in March 2006 ICHP concluded that the fiscal year 2005 administrative data for STAR, CHIP, and STAR+PLUS are of very good quality and can be used for risk adjustment purposes in addition to their use in monitoring MCO quality performance. As of the submission of this annual report, the NorthSTAR data certification was on hold pending final receipt of fiscal year 2005 NorthSTAR claims and encounter data from HHSC.

Encounter Data Validation

In 2005, ICHP conducted the third encounter data validation study for the Texas STAR, CHIP, and STAR+PLUS claims and encounter data. The information found in the claims and encounter data was compared to that found in the enrollees' medical records. ICHP reviewed 8,385 medical records for care provided in January through March 2004 and matched encounters in those records to encounters found in the claims and encounter data for the same time period. The provider response to the record requests exceeded 85 percent on average for all three programs.

Using the CMS Protocol for Encounter Data Validation, ICHP established an 80 percent incremental target for a date of service match between the encounters in the medical record and the encounters in the claims and encounter database. The CMS protocol states that rates of matching encounters documented in the medical record with those in data submitted by MCOs may initially be low but should improve over time as the MCOs improve their data management and work with providers to submit accurate, timely claims. In terms of the date of service match, STAR improved to 84 percent from 75 percent in the prior year's study and CHIP improved to 92 percent from 90 percent. STAR+PLUS dropped from 85 percent to 80 percent. Fiscal year 2005 was the first year that all programs achieved the 80 percent target rate. At the MCO level, only one MCO in STAR performed at less than 80 percent for date of service match, Texas Children's Health Plan at 71 percent. It should be noted that this reporting period presented Texas Children's second year participating as a

STAR MCO. Their match rates are similar to those of the other STAR MCOs in their first two years of evaluation.

All CHIP MCOs demonstrated a date of service match rate exceeding 85 percent. With one exception in this third year of validation, MCOs participating in both STAR and CHIP consistently demonstrate better match rates for their CHIP product when compared to STAR though the gap is closing. The single MCO that had a lower date of service match rate for STAR over CHIP was Amerigroup, which had 88.9 percent for STAR and 86.7 percent for CHIP, although both of these values are above the improvement target of 80 percent. The reasons for the better match rates in CHIP versus STAR are not known. However, CHIP MCOs had experience submitting encounter data to ICHP for approximately two years prior to the STAR submissions, which began in September 2002. Thus, the CHIP plans were receiving ongoing feedback from ICHP for a longer period of time than the STAR plans, which may have contributed to an improvement in the data quality.

One of the two STAR+PLUS MCOs, Evercare, fell below the target rate, demonstrating a date of service match rate of 75 percent, which was a 15 percentage point drop from their prior year performance. In contrast to Amerigroup, the other STAR+PLUS MCO, which has demonstrated improvement each year in date of service match rate, Evercare has exhibited wide variation by increasing from 67 percent in the first study to 90 percent in the second study, then dropping to 75 percent in this third evaluation. The causes for this variation are not readily evident through the encounter data validation review. ICHP needs to work with HHSC to assess the cause because the STAR+PLUS encounter data is not submitted directly to ICHP by the MCOs but is first received by HHSC and then forwarded to ICHP.

Matching primary diagnosis in the claims and encounter data with the diagnosis indicated by the provider in the medical record is also done as part of the review process. Using CMS guidelines, ICHP reviewers do not attempt to interpret the provider's documentation in the medical record, rather, they must exactly match the diagnosis in the encounter data with a diagnosis documented by the provider in the record for that encounter. Using this strict matching process, the findings relative to diagnosis match likely represent a worse case scenario.

As a program, STAR overall achieved the 80 percent improvement target for diagnosis match. Three STAR MCOs did not achieve that target but demonstrated improvement over prior year performance. CHIP overall decreased slightly from the prior year study but still demonstrated an 85 percent diagnosis match rate. STAR+PLUS had a 71 percent diagnosis match rate. While STAR+PLUS did not achieve the improvement target, the program overall had a seven percentage point improvement from the prior year with both participating MCOs demonstrating improvement.

With some variation at the MCO level, the Texas STAR, CHIP, and STAR+PLUS claims and encounter data has shown generally steady improvement in data quality over the past three years. **Table 1** provides the performance of each program over the three years of evaluation for the elements of date of service match and diagnosis match.

Table 1. Annual Program Comparison of Date of Service and Diagnosis Match

Program	Date of Service			Diagnosis		
	2002	2003	2004	2002	2003	2004
STAR	69.0%	75.2%	83.9%	68.3%	68.3%	80.0%
STAR+PLUS	73.0%	84.8%	80.3%	53.8%	64.3%	70.8%
CHIP	87.0%	89.9%	91.6%	75.6%	87.9%	84.6%

While some MCOs require improvement, ICHP concluded that the overall quality of the claims and encounter data is acceptable for measuring quality of care indicators and for rate setting and reimbursement. HHSC can continue to improve the quality of the claims and encounter data used for these purposes by 1) providing MCOs with study results and 2) supporting ICHP interaction with MCOs to address possible causes for poorer performance. In addition to continuing claims and encounter data validation, ICHP will continue to work with HHSC and the MCOs to further define possible causes of insufficient data quality and to suggest improvement strategies.

MCO Structure and Process Evaluation

Evaluation of MCO structure and process is conducted to ensure 1) compliance with HHSC and CMS requirements and 2) that MCOs have the capabilities to support continuous improvement of care for their members. This component of external quality review is conducted using a combination of document review and site visit/phone interviews.

MCO Administrative Interviews

CMS protocols recommend that the Medicaid Managed Care external quality review include in-depth interviews with MCO administrators to gain a thorough understanding of how MCOs provide care and service to their membership and how they monitor the quality of care their enrollees receive. ICHP developed a comprehensive questionnaire that is used as part of the overall quality of care assessment for STAR, STAR+PLUS, CHIP, and NorthSTAR enrollees.

ICHP obtained input from HHSC on important elements to include in this evaluation and these were incorporated into the MCO Administrative Interview questionnaire. Areas covered in the questionnaire included: Organizational Structure, Children's Programs, Care Coordination and Disease Management Programs, Quality Assessment and Performance Improvement, Utilization and Referral Management, Provider Network and Contractual Relationships, Provider Reimbursement and Incentives, Enrollee Rights, Grievance Procedures, Health Information Management, Data Acquisition, New Enrollees, Delegation, and Value Added Services. The NorthSTAR questionnaire also included items specific to behavioral health.

The questionnaires were forwarded to each MCO for completion. In addition, the MCOs were asked to provide supporting documentation for the items, including, but not limited to, member satisfaction surveys, written policies and procedures, and clinical practice guidelines. Following review of the returned questionnaires, ICHP submitted specific questions to the MCOs for further clarification. The MCOs' responses to these questions were discussed during onsite interviews or during telephone conference calls.

Plans were selected for onsite review or for telephone conference calls based on their questionnaire responses and in consultation with HHSC. In general, MCOs were selected for onsite reviews if concerns about their structure and processes were identified by HHSC or from review of their questionnaire responses. The interviews were scheduled with the MCOs between May 3, 2005, and June 14, 2005. The MCOs were required to have administrative staff and others present who could fully address the content of the questionnaire. These staff included Medical Directors, Chief Financial Officers, quality review staff, member services staff, and others.

Site visits were conducted with: Amerigroup, Mercy, Superior, El Paso First, Community Health Choice, Evercare, Texas Children's Health Plan, Driscoll, Community First, and ValueOptions. Conference calls were conducted with UTMB, FIRSTCARE, Cook Children's, Parkland Community, and Seton. Conference calls were scheduled for two hours and the site visits for four hours. ValueOptions was visited in November 2005.

Using a combination of questionnaire responses, review of MCO documents, and interviews with MCO staff, ICHP compiled a description of each of the participating MCOs' critical structure and process elements that support the provision of care and service. A summary of the findings was sent to the MCO for final comments and verification with needed changes made before they were compiled into a matrix containing all MCO responses. ICHP presented the fiscal year 2005 MCO Administrative Interview findings to HHSC Health Plan Operations in November, providing clarification as needed to plan managers assigned to work with participating MCOs to ensure compliance with certain state and federal requirements.

All MCOs participating in Texas Medicaid Managed Care and CHIP were in substantial compliance with requirements as defined by CMS and HHSC. Elements identified as having a potential to influence quality of care are presented in the appropriate section later in this report.

MCO Performance Improvement Projects

STAR and STAR+PLUS

STAR and STAR+PLUS reports of MCO-conducted focus studies or Performance Improvement Projects (PIPs) are submitted annually. In fiscal year 2005, participating MCOs submitted PIPs for the year ending August 2004. ICHP evaluated compliance and also provided MCOs with individual feedback on their performance, including suggestions for improvement in planning for and conducting an effective PIP.

The current MCO contracts require focus studies with actual PIP requirements not effective until September 2006. ICHP used CMS guidelines for conducting PIPs to evaluate the submitted studies and to provide the MCOs with information needed to transition from a focus study approach to a PIP approach.

All STAR and STAR+PLUS MCOs submitted a focus study/PIP summary for SFY 2004 as required by HHSC. **Table 2** provides a list of the MCO focus study or PIP topics evaluated by ICHP for fiscal years 2003 and 2004.

Table 2. MCO Performance Improvement Topics for Fiscal Years 2003 and 2004

MCO	Focus Study/PIP - 2003	Focus Study/PIP - 2004
Amerigroup	Asthma	Asthma
Community First	Comprehensive Diabetes Care	Comprehensive Diabetes Care
Community Health Choice	Management of High Risk Pregnancies	Management of High Risk Pregnancies
El Paso First	Initiation of Prenatal Care and Postpartum Checkups	Emergency Room Utilization
Evercare	Influenza/Pneumococcal Immunizations	Influenza /Pneumococcal Immunizations
FIRSTCARE	Utilization of Services and Asthma Control	Utilization of Services and Asthma Control
Parkland Community	Reducing Medically Unnecessary Emergency Room Visits	Improving Identification of Children with Special Health Care Needs
Superior	Evaluation of Compliance with Guidelines Recommending Group Beta Streptococcus Testing and Management in Pregnant Women	Emergency Department Access by STAR for Non-Emergent Care Services
Texas Children's	Monitoring and Improving the Treatment of Pharyngitis	Monitoring and Improving Preventive Health Utilization

While MCOs did not consistently use the HHSC format for reporting PIPs, the majority were able to include the CMS-defined components of a PIP. In some cases, the MCO used indicators to assess quality that ICHP also calculates as part of the external review process. The MCO and ICHP results for those indicators were compared to validate MCO findings. The overall mean compliance for PIP requirements was 88 percent, up from 77 percent in SFY 2003. Five of nine MCOs scored over 91 percent, demonstrating consistent reporting of HHSC-required elements.

The CMS protocol for validating PIPs requires the reviewer to reach one of four conclusions: 1) high confidence in reported MCO PIP results, 2) confidence in reported MCO PIP results, 3) low confidence in reported MCO PIP results, or 4) reported MCO PIP results not credible. Following CMS guidelines, ICHP reviewers based their conclusions on the MCO's ability to clearly present the plan for, and the results of, the study. No MCOs received a "High Confidence" or "Not Credible" rating. Eight of the nine MCOs received a "Confidence" rating by presenting credible focus studies with some exhibiting elements of a PIP. El Paso First received a "Low Confidence" rating, primarily due to use of overlapping measurement periods and erroneous conclusions drawn by the MCO based on this ineffective measurement method. In addition, Community First provided an exceptional presentation of a Diabetes PIP, utilizing the HEDIS® 2004 Comprehensive Diabetes Care measures.

As part of the Value Based Purchasing initiative to be implemented in fiscal year 2007, HHSC will work closely with participating MCOs to establish and achieve goals in improvement of care and service, and ICHP will increase emphasis on validating MCO improvement projects used in goal setting with HHSC. Well-organized and effective MCO PIPs are important to the success of this implementation. ICHP made recommendations for improvement to each MCO submitting a focus study or PIP. In addition, ICHP made recommendations to HHSC about providing educational content to participating MCOs on planning, conducting, and reporting an effective PIP.

NorthSTAR

HHSC forwarded four summaries of ValueOptions' quality improvement projects conducted during 2004-2005 to ICHP for review and evaluation. ValueOptions is the Managed Behavioral Health Care

Organization (MBHCO) providing behavioral health services to Texas Medicaid clients in the Harris service area under the NorthSTAR Program.

ValueOptions used two different formats in reporting the projects. The projects were evaluated using a format based on the CMS protocol for validating a PIP. HHSC and ICHP use this format in evaluating PIPs for the STAR Medicaid Managed Care Program in Texas. Because ValueOptions was not required to report in that format, the CMS PIP format was used only as a basis for comment and recommendation for improvement rather than for scoring compliance. The four topics submitted are listed in **Table 3** with comments regarding the topic and opportunities to improve in future PIPs.

Table 3. NorthSTAR (ValueOptions) Performance Improvement Projects

PIP Topic	Comments/Opportunities to Improve
Timeliness of Complaint and Administrative Appeal Resolution	Timely non-clinical topic addressing state requirement; approaches to improve recommended in trending results to more clearly associate changes to interventions and process for determining causes of delay.
Improving Ambulatory Follow-Up Care within 7-Days after Hospitalization for Mental Illness	Indicator of clear importance to ValueOptions as a MBHCO; approaches to improve include more frequent production of their follow-up indicator and clear tracking of interventions as well as improving analysis of potential causes of failure.
NorthSTAR Care Coordination for Children	This is a follow-up of a prior focus study conducted by ICHP; approaches to improve include more clearly defining the indicators and ensuring the activity addresses the NorthSTAR scope, both in terms of providers and members.
Clinical Outcomes of Chemical Dependency Treatment – NorthSTAR	Study was a replication of a study previously conducted by ICHP and not fully developed as an improvement project; ValueOptions did determine including alternative documentation in chemical dependency treatment improved compliance.

MCO Quality Improvement Program Summaries

STAR and STAR+PLUS

STAR and STAR+PLUS MCO annual Quality Assessment and Performance Improvement (QAPI) summaries are submitted annually to demonstrate compliance with specific quality program standards required by HHSC. In fiscal year 2005, participating MCOs submitted summaries for the year ending August 2004 with the QAPI plan that was in place during fiscal year 2004. ICHP evaluated compliance and also provided MCOs with individual feedback on their performance, including suggestions for improvement in planning for and conducting an effective quality program. Well-organized and effective MCO quality programs are essential in continuous improvement of quality care and service for STAR and STAR+PLUS members in Texas.

As required by HHSC, all STAR and STAR+PLUS MCOs submitted a QAPI summary for SFY 2004, substantially following the HHSC required format. Mean compliance with QAPI elements was 97 percent overall, up from 81 percent in fiscal year 2003; all MCOs scored 92 percent or above, demonstrating consistent reporting of required elements.

STAR and STAR+PLUS MCOs predominately addressed service indicators, though more clinical indicators were included than in the prior fiscal year quality programs. The MCOs need to transition toward more clinical indicators, which are important elements in achieving clinical improvement. **Table 4** presents the service and clinical quality activities commonly addressed by the STAR and STAR+PLUS MCOs.

Table 4. Quality Activities/Indicators Reported by 50 Percent or More of STAR and STAR+PLUS MCOs

Clinical		Service	
Activity or Indicator	**Percent Reporting**	**Activity or Indicator**	**Percent Reporting**
Prenatal/Perinatal	89%	Availability/Accessibility	100%
ED Utilization	78%	Claims Processing	100%
Immunizations	78%	Member Complaints	100%
THSteps/Well-Child Visits	78%	Provider Complaints	100%
Behavioral Health Follow-Up	78%	Telephone Access/Process	100%
Utilization Indicators	67%	Child/Adolescent Primary Care Access	67%
Asthma	67%	Member Satisfaction	67%
		Member Education/Support	56%
		Frequency of Selected Procedures/Q-tags	56%

Percent is calculated from number of MCOs reporting the activity divided by the total number of MCOs (9).

ICHP submitted recommendations to HHSC for use in working with the STAR and STAR+PLUS MCOs to develop and maintain effective quality programs. These included: 1) providing the MCOs with individual feedback on compliance and suggestions for improvement, 2) developing a reporting format that will allow MCOs active in Medicaid Managed Care and CHIP to report concurrently, and 3) involving participating MCOs in an improvement effort designed to document and share best practices in the provision of clinical care and service. ICHP also suggested that HHSC provide a review of clinical indicator development and use during an educational session with participating MCOs. Finally, ICHP recommended that HHSC remove clinical practice guidelines and utilization management from the annual QAPI summary requirements and have ICHP to evaluate these elements during the MCO Administrative Interview process.

CHIP

In fiscal year 2005, CHIP MCOs submitted their annual Quality Improvement Program (QIP) summaries for the year ending August 2004 to demonstrate compliance with specific quality program standards. Their summaries were submitted with the QIP plan that was in place during fiscal year 2004. ICHP evaluated compliance and also provided MCOs with individual feedback on their performance, including suggestions for improvement in planning for, and conducting, an effective quality program. Well-organized and effective MCO quality programs are essential in continuous improvement of quality care and service for CHIP members in Texas.

All CHIP MCOs submitted a quality plan and QIP summary for fiscal year 2004. In scoring required elements, mean compliance for CHIP overall was 98 percent, up from 93 percent in fiscal year 2003. All MCOs scored over 90 percent, demonstrating consistent reporting of required elements according to HHSC requirements. All standards were scored the same or better when compared to the previous fiscal year.

Two quality of care indicators were addressed by over 90 percent of MCOs: asthma and emergency department utilization. Four service quality activities and indicators were addressed by all MCOs: credentialing processes, telephone access/processes, member complaints, and provider access and availability. **Table 5** presents the service and clinical quality activities commonly addressed by the CHIP MCOs.

Table 5. Quality Activities and Indicators Reported by 50 Percent or More of CHIP MCOs

Clinical		Service	
Activity or Indicator	**Percent Reporting**	**Activity or Indicator**	**Percent Reporting**
Asthma	91.7%	Credentialing Process	100%
ED Utilization	91.7%	Telephone Access/Process	100%
Behavioral Health Follow-Up	75.0%	Member Complaints	100%
Preventive/Well-Child	66.7%	Availability/Accessibility	100%
Diabetes	50.0%	Claims Processing	83.3%
		Provider Satisfaction	75.0%
		Denials/Appeals	75.0%
		Provider Complaints	66.7%
		Delegation Monitoring	66.7%
		Member Satisfaction	58.3%
		PCP Panels/Adequacy	50.0%

Percent is calculated from number of MCOs reporting the activity divided by the total number of MCOs (12).

Best practice in clinical care or service could not be determined from the reports, but four MCOs, Mercy, Cook Children's, Seton, and Parkland Community were noted to exhibit best practices in the presentation of their quality activities. ICHP submitted recommendations to HHSC for use in working with the CHIP MCOs to develop and maintain effective quality programs. These included providing the CHIP MCOs with individual feedback on compliance and suggestions for improvement. Other recommendations included working with ICHP and the participating MCOs to develop a reporting format that will allow MCOs active in both Medicaid Managed Care and CHIP to report concurrently and to involve participating MCOs in an improvement effort designed to document and share best practice in provision of clinical care and service to CHIP members.

MCO Member Service and Provider Office Phone Calls

Member Service

In fiscal year 2005, ICHP reported results to HHSC on calls made to participating STAR, CHIP, and STAR+PLUS member service phone lines. Calls were made to assess the ability of the representative answering the call to provide appropriate information to a member in several different situations. Using scenarios developed by HHSC, ICHP staff called the MCO member service numbers, identified themselves as EQRO staff assessing member service responses, and presented the scenarios. Responses were recorded in addition to timing the overall call and certain call elements.

Scenarios used addressed the following topics: 1) Cultural and Linguistic Services, 2) Emergency Care, 3) Prenatal Care, 4) Community Services, 5) Well-Child Checks, 6) Behavioral Health Services, 7) Routine Care, 8) Urgent Care, and 9) Value Added Services. In the majority of calls, the person answering the phone responded to the questions posed. In some cases, the individual obtained supervisory approval before responding.

ICHP initially summarized the call data by overall program performance. In this reporting, call timing (overall call length, time to first response, time to initial "live response," and amount of time on hold) was not an issue, on average, for any of the programs. However, there was variation in individual

call results. HHSC requested that ICHP prepare MCO-specific reports to facilitate follow-up by HHSC Health Plan Operations with the MCOs regarding their performance. Following this review, HHSC worked with ICHP to define areas for improvement in future assessment of member service phone response to include: 1) developing specific scenarios for STAR, STAR+PLUS, and CHIP to address the program and member differences, 2) ensuring each MCO was evaluated on every scenario rather than the random assignment used in the initial study, and 3) standardizing the "outside of office hours" time frames for selected calls.

Provider Office

In fiscal year 2005, ICHP reported results to HHSC on calls made to participating STAR, CHIP, and STAR+PLUS provider offices. Calls were made to obtain an assessment of provider satisfaction with participating MCOs, determine MCO ability to adequately inform providers of member eligibility, and to assess certain elements of member access to appointments as required by HHSC. Using a four point rating scale, 93 percent of STAR providers, 92 percent of STAR+PLUS providers, and 95 percent of CHIP providers surveyed expressed satisfaction with the contracted MCO. An overall summary of program performance was provided to HHSC along with specific positive and negative comments made by provider office representatives during the survey.

In response to a question regarding timeliness of notification of assigned member panels, many provider offices could not remember the specific timing of notification but stated that identifying member status was not a problem. Member access to adult and child well care, routine ongoing care, and urgent care was within HHSC standards in excess of 97 percent for STAR, CHIP, and STAR+PLUS providers responding. Only 65 percent of STAR providers and 63 percent of STAR+PLUS providers reported access to prenatal appointments within requirements. ICHP and HHSC jointly identified areas to improve in this assessment process, including providing findings to the MCOs in a format that would more readily facilitate follow-up of provider concerns.

Quality of Care

Activities directed at managing and improving data quality and evaluating MCO structure and processes are important, but evaluating the quality of care provided to members has the greatest potential for supporting continuous improvement of care. This component of external quality review is done using administrative, medical record review and member survey data and reporting results for member satisfaction, use of services, access/availability, and effectiveness of care.

Member surveys are done annually for STAR+PLUS and on alternating years for CHIP and STAR. In fiscal year 2005, STAR members were surveyed. The performance measures are reported to HHSC in the quarterly quality of care and financial performance chart books created for STAR, CHIP, and STAR+PLUS and quality of care chart book created for NorthSTAR.[5]

Three data sources were used to calculate the quality of care and use indicators presented in the chart books: (1) person-level enrollment information, (2) person-level health care claims/encounter data, and (3) person-level pharmacy data. The enrollment files contain information about the person's age, gender, the MCO in which the person is enrolled, and the number of months the person was enrolled in the program. The person-level claims/encounter data contain Physician's Current Procedural Terminology (CPT) codes, International Classification of Diseases, 9th Revision (ICD 9-CM) codes, place of service (POS) codes, and other information necessary to calculate the quality of care indicators. The person-level pharmacy data contains information about filled prescriptions including the drug name, dose, date filled, and refill information.

Two measures require medical record review in order to calculate the quality of care measure, HEDIS® Controlling High Blood Pressure and two elements of the HEDIS® Comprehensive Diabetes

Care. Because of the need to request medical records and conduct review, the measurement period for record review measures was January 1, 2004, through December 31, 2004.

Whenever possible, comparisons are made to other Medicaid programs. NCQA gathers data from Medicaid managed care plans nationally and compiles them.[6] Submission of HEDIS® data to NCQA is a voluntary process; therefore, health plans that submit HEDIS® data are not fully representative of the industry. Health plans participating in NCQA HEDIS® reporting tend to be older, are more likely to be federally qualified, and are more likely to be affiliated with a national managed care company than the overall population of health plans in the United States.[7] For comparison purposes to Texas Medicaid and CHIP MCO program findings, the NCQA Medicaid managed care plans 2004 mean results are used. This information is not available for all of the quality of care indicators.

In addition to HEDIS® comparisons, STAR and STAR+PLUS chart books include comparisons to PCCM and Medicaid FFS. All chart books, except NorthSTAR, with a single contracted behavioral health managed care organization, also include comparisons among the participating MCOs where appropriate. STAR+PLUS, CHIP, and NorthSTAR include comparisons with prior year results for many measures. This was not possible for STAR because the fiscal year 2005 chart book, at the request of HHSC, separated measures for enrollees eligible for Temporary Assistance for Needy Families (TANF) as opposed to those eligible for Supplemental Security Income (SSI). The prior year calculated measures with the two groups combined.

In addition to the narrative and graphs contained in the chart books, Excel spreadsheets are provided to HHSC containing all of the data to support key findings. As previously noted, many, but not all, of the quality of care indicator results are presented for each MCO. Some results were not displayed for each MCO (1) to facilitate ease of presentation and understanding of the material, and/or (2) because the findings were similar for each MCO. However, all of the findings are contained in the Excel spreadsheets, and the interested reader can review those for more details.

Satisfaction with Care

CAHPS Health Plan Survey STAR, PCCM, and STAR+PLUS

An enrollee's satisfaction with health care is important. Studies have shown that positive enrollee satisfaction ratings are linked to positive health care outcomes.[8] Satisfaction with health care is also associated with positive health care behaviors, such as adhering to treatment plans and appropriate use of preventive health care services.[9]

Assessing parental satisfaction with their children's health care is also an important measure of the quality of children's health care.[10] Studies have shown that satisfaction ratings reflect parent expectations of their children's health care and provide inherent ratings of parents' judgment about the overall delivery of their children's health care services.[11, 12]

The Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Version 3.0 was used to assess STAR MCO Program, PCCM, and STAR+PLUS adult enrollees' satisfaction with their health care.[13] The CAHPS Health Plan Survey was also used to assess satisfaction of caregivers of child enrollees in the STAR MCO Program and PCCM. The CAHPS Health Plan Survey contains composites, which are scores that combine results for closely related survey items, to provide comprehensive yet concise results for multiple survey questions.[14] CAHPS Health Plan Survey composite scores address the following domains for adult enrollees: 1) getting needed care, 2) getting care quickly, (3) doctor's communication, 4) interactions with the doctor's office staff, and 5) health plan customer service. For caregivers of child enrollees, the preceding five

composite scores are used with the addition of 1) obtaining prescription medication, 2) getting specialized services for their children, 3) family-centered care, and 4) coordination of their child's care. Using this composite scoring method, a mean score was calculated for each of the areas that could range from 0 to 100 points with higher scores indicating greater satisfaction. **Tables 6 and 7** present the CAHPS Health Plan Survey composite scores for adult enrollees and caregivers of child enrollees.

Table 6. Average CAHPS Health Plan Survey Cluster Scores: Adult Enrollee Satisfaction with Their Health Care

STAR, N= 2,361; PCCM, N= 401; STAR+PLUS, N= 601

Program	Getting Needed Care	Getting Care Quickly	Doctor's Communication	Office Staff	Customer Service
National Medicaid CAHPS Mean	75.60	77.30	85.80	88.20	67.20
PCCM Overall	77.06	64.62	83.36	86.21	77.92
STAR Overall	79.13	62.82	84.04	85.28	83.79
STAR+PLUS Overall	71.05	63.74	81.84	86.04	Not Available

Table 7. Average CAHPS Health Plan Survey Cluster Scores: Caregiver Satisfaction with Their Children's Health Care

STAR, N= 3,606; PCCM, N=400

Program	Getting Needed Care	Getting Care Quickly	Doctor's Communi-cation	Office Staff	Customer Service	Prescription Medication	Specialty Care	Family-Centered Care	Care Coordina-tion
National Medicaid CAHPS Mean	Not available for Child CAHPS Health Plan Survey Composites.								
PCCM Overall	84.13	50.94	82.42	82.63	87.77	94.26	85.90	72.40	59.29
STAR Overall	84.03	53.53	84.56	84.48	89.42	91.64	74.94	75.29	68.74

The overall scores for the PCCM Program and STAR MCO Program adult enrollees were higher than the Medicaid national mean for getting needed care and customer service. The Medicaid national mean scores are the scores from Medicaid managed care plans that choose to report their CAHPS Health Plan Survey results to the National Committee for Quality Assurance (NCQA). While PCCM and STAR scores were slightly higher for getting needed care (77 and 79 compared to the national average of 76), there was greater variation in the customer service score. The national Medicaid plan mean for customer service is 67. PCCM Program enrollees in Texas rated health plan customer service almost 11 points higher at 78. STAR MCO Program enrollees rated health plan customer service at 84—almost 17 points higher than the national average.

The PCCM Program and STAR MCO Program enrollees' ratings for the remaining domains (getting care quickly, doctor's communication, and doctor's office staff) were lower than those of Medicaid plans reporting to the NCQA. The greatest variation among these domains was in getting care quickly. The NCQA average for getting care quickly was 77 points while PCCM Program enrollees rated this domain at 65 and STAR MCO Program enrollees rated this domain at 63.

Overall, there were only small levels of variation in satisfaction ratings between PCCM Program and STAR MCO Program enrollees. For four out of five domains, the difference in scores was less than three points. However, STAR MCO Program enrollees rated health plan customer service almost six points higher than PCCM Program enrollees rated this domain.

The CAHPS Health Plan Survey composite scores reveal some variability among MCO and MCO service delivery area (SDA) performance. FIRSTCARE had the highest score of all MCOs/MCO SDAs for three of the five domains: getting care quickly (69), doctor's communication (90), and doctor's office staff (91). Texas Children's and Superior-Travis SDA had the lowest score of all MCOs/MCO SDAs for two domains. Texas Children's had the lowest score for enrollee experiences with how well doctors communicate (80) and enrollee experiences with courtesy, respect, and helpfulness of the doctor's office staff (79). Superior-Travis had the lowest scores for enrollees' experiences with getting needed care (71) and health plan customer service (74).

Caregivers of child enrollees rated the PCCM and STAR MCO programs very well in seven out of nine CAHPS Health Plan Survey domains, scoring at or above 75 points out of a possible 100 points. Parents' ratings of the two programs with regard to getting care quickly and care coordination were less favorable. The composite score for getting care quickly was 51 points for the PCCM Program and 54 points for the STAR MCO Program. The score for care coordination for both programs was 69 points out of a possible 100 points.

With the exception of getting specialty care and care coordination, the CAHPS Health Plan Survey composite scores for the PCCM Program and the STAR MCO Program overall are fairly similar. For seven of the nine domains, there is less than a three-point spread between overall scores for PCCM and STAR. However, there is almost an eleven-point difference for the specialty care domain with the STAR MCO Program respondents rating care lower than those served by the PCCM Program. The rating provided by STAR respondents, however, was almost 75 points out of a possible 100 points, indicating that their experiences were close to being usually or always positive.

There is some variability in MCO performance within the STAR MCO Program. FIRSTCARE had the highest score of all MCOs/MCO SDAs for six of the nine domains: parents' experiences with getting needed care, getting care quickly, doctor's communication, office staff, prescription medicine, and family-centered care. Community Health Choice and Amerigroup serving the Harris SDA had the lowest scores of all MCOs and MCO SDAs for three domains. Community Health Choice scored lowest in prescription medication, specialty care, and family-centered care while Amerigroup-Harris had the lowest scores for getting care quickly, doctor's communication, and families' experiences with courtesy, respect, and helpfulness of office staff.

Multivariate analyses also revealed some significant differences between the MCOs in their performance on the CAHPS Health Plan Survey domains, after controlling for child enrollee health status, race/ethnicity, and respondent education status. Amerigroup serving the Dallas, Harris and Tarrant SDAs, Parkland Community, Community Health Choice, Texas Children's, and Superior in the Bexar and Travis SDAs performed significantly worse than the reference MCO (the MCO with the highest score for the cluster) in at least three of the nine CAHPS Health Plan Survey composites.

The overall CAHPS Health Plan Survey domain scores for STAR+PLUS enrollees were lower than the Medicaid national mean for all four domains. The Medicaid national mean scores are the scores from Medicaid managed care plans that choose to report their CAHPS Health Plan Survey results to the National Committee for Quality Assurance (NCQA) and reflect a general Medicaid patient population. The greatest difference occurred in the domain getting care quickly. STAR+PLUS Program enrollees rated their program almost 16 points lower than the national average for this

domain. The second greatest difference in scores was for the domain, doctor's communication. The national Medicaid mean was almost nine points higher than the STAR+PLUS Program. The differences in scores for getting needed care and courtesy of office staff were similar. STAR+PLUS enrollees rated their health plan almost six points lower than enrollees of Medicaid plans reporting to the National Committee for Quality Assurance (NCQA).

The CAHPS Health Plan Survey composite scores reveal some variability among MCO performance. The most significant variance in STAR+PLUS was Amerigroup scoring four points higher than Evercare in getting needed care and getting care quickly.

For the satisfaction with care category, the EQRO has the following recommendations for services for adult enrollees in the STAR MCO, PCCM, and STAR+PLUS programs:

1) Reviewing MCO provider panels to ensure adequate access to specialty care;
2) Reviewing MCO provider panels to ensure adequate numbers of providers; and
3) Reviewing authorization procedures to ensure that care can be rendered quickly.

For the satisfaction with care category, the EQRO has the following recommendations for services for caregivers of child enrollees in the STAR MCO and PCCM programs:

1) Reviewing MCO provider panels to ensure adequate numbers of, and access to, primary and specialty care providers;
2) Reviewing authorization procedures to ensure that care can be rendered quickly;
3) Increase provision of the American Academy of Pediatrics (AAP) training programs related to providing a medical home for all pediatric providers, particularly the PCCM Program providers; and
4) Reviewing the eight MCO/SDAs who performed poorly on three or more CAHPS Health Plan Survey composite scores to develop a plan to address consumer satisfaction. This includes Amerigroup serving the Dallas, Harris, and Tarrant Service Delivery Areas (SDAs), Parkland Community, Community Health Choice, Texas Children's, and Superior in the Bexar and Travis SDAs.

STAR+PLUS Unmet Needs

While disabled individuals comprise about one-sixth of the Medicaid caseload, they account for over one-third of the expenditures.[15] Despite this, little research has focused on the health care needs and experiences of disabled Medicaid beneficiaries. [16,17] More specifically, there is a dearth of information regarding the unmet health care needs of this population. Thereby, policy makers have little data by which to develop and improve existing specialized health care programs for persons with disabilities who are on Medicaid.

In order to assess the unmet long term health care needs of STAR+PLUS enrollees, the EQRO conducted a telephone survey focusing on questions from the Participant Experience Survey: Elderly/Disabled (PES E/D) to gain information about enrollee's experiences with health care services and supports. The highest percent of respondents who needed a specific type of care and lacked access to that care occurs among respondents who needed special equipment to make life easier. Although 17 percent of respondents stated they needed special equipment or modifications, the majority (58 percent) have not received needed assistance. This was closely followed by respondents who indicated they needed assistance with groceries (45 percent), laundry (35 percent), and housework (43 percent) but lacked access to a person who could provide them with that help. Fifty-eight percent of those who needed assistance with grocery shopping, 54 percent of those who needed help with laundry and 52 percent of those who needed help with housework did not have access to these support services.

The next grouping of respondents who indicated they had a need for which they had no assistance included those with needs for toileting, transportation, meal preparation, and medication preparation. Although a relatively small percentage of respondents stated they needed assistance getting to or using the bathroom (12 percent), many of those who had the need (41 percent) indicated they did not have access to this assistance. A sizeable percentage of respondents indicated that they needed assistance with transportation to work, doctor's appointments, or social activities (40 percent). Of that, 40 percent indicated they lacked access to a person who could provide them with that assistance. Thirty-three percent and 41 percent of respondents indicated a need for special help with meal preparation and medication preparation, respectively. Of those, a significant number indicated they lacked access to someone who could provide assistance (37 percent for meal preparation and 36 percent for medication preparation).

The final grouping of respondents who indicated they had a need for which they had no assistance included those with needs for bathing, eating, transferring from a bed, and dressing. While the percentages of respondents with these needs are the smallest and the percentages that lack assistance for these needs are the smallest of all needs represented, the needs themselves are not insignificant. Of the 26 percent who need assistance with bathing, 32 percent lack this help. Of the 22 percent who indicated they need help with dressing, 25 percent do not have a person to assist them with this need. Of the 20 percent who need assistance getting out of bed, 27 percent identified they did not have help. Of the eight percent who needed help feeding themselves, 32 percent stated they did not have a person to help them.

Use of Services

Table 8 shows the indicators assessed in the use of services category and the performance for each of the programs overall relative to the mean score for Medicaid plans reporting to NCQA nationally.

Table 8. Use of Service Indicators

Indicator	HEDIS® 2004 Mean	CHIP Overall	STAR Overall	STAR+PLUS Overall	NorthSTAR Overall
HEDIS® Inpatient Utilization: General/Acute Care Discharges per 1,000 Member Months	8.2	1.58	9.96	27.88	N/A
HEDIS® Outpatient Visits per 1,000 Member Months	279.50	240.40	413.56	542.37	N/A
HEDIS® Emergency Department Use per 1,000 Member Months	49.50	35.67	104.85	124.91	N/A
HEDIS® Mental Health Utilization-Members Receiving Inpatient, Day/Night, Ambulatory Services	7.10%	4.80%	3.78%*	25.46%	3.19%** 3.62%***
HEDIS® Average Cost of Prescriptions Per Member Per Month	$35.80	$18.61	$19.16	$236.91	N/A

*Excludes NorthSTAR; **Excludes NorthSTAR-specific services; *** Includes NorthSTAR-specific services

Use of services is an important area to assess. Service utilization can indicate if enrollees are receiving appropriate levels of care. For example, the enrollment of Medicaid beneficiaries into managed care is believed to foster preventive care and outpatient use while appropriately minimizing inpatient and emergency room use.[18] For all enrollees, the majority of care is expected to be delivered in the outpatient setting with little emergency department and inpatient use.

Within the use of services category, CHIP in Texas demonstrated lower utilization than the mean for health plans reporting nationally for the following indicators:

- HEDIS® Inpatient Utilization: General/Acute Care Discharges per 1,000 Member Months (MM);
- HEDIS® Outpatient Visits per 1,000 Member Months;
- HEDIS® Emergency Department (ED) Use per 1,000 Member Months; and
- HEDIS® Average Cost of Prescriptions per Member per Month.

There was some variation for each of the aforementioned indicators by individual MCOs. In depth information on variation in MCO performance can be found in the Texas Children's Health Insurance Program Financial Performance Measures Chart Book for fiscal year 2005.[19] However, a potential need for improvement was noted with FIRSTCARE, which had the highest ED use rate among their enrollees with major chronic conditions. It was noted that there could be opportunities to better manage the care for enrollees with major chronic conditions in this MCO.

It should be noted that the HEDIS® mean includes data from Medicaid plans reporting to NCQA. There is no available HEDIS® mean specifically for CHIP. CHIP in Texas performed significantly better than the HEDIS® Medicaid mean for many of the use of services quality indicators. This is possibly due to the differences in the population served by CHIP and the enrollees in the Medicaid plans reporting to NCQA.

Within the use of services category, the STAR+PLUS Program performed better than the mean for health plans reporting nationally for the indicator:

- HEDIS® Mental Health Utilization-Members Receiving Inpatient, Day/Night, and Ambulatory Services

Mental health care utilization for STAR+PLUS enrollees is over three times higher than Medicaid plans reporting to NCQA (25 percent of STAR+PLUS membership compared to 7 percent of Medicaid membership nationally reporting). This high rate of utilization is likely due to the health status of the STAR+PLUS Program enrollees as well as the program eligibility criteria which includes those who have mental health disabilities.

The STAR MCO and STAR+PLUS programs demonstrated higher utilization than the NCQA mean for the following indicators in use of services category:

- HEDIS® Inpatient Utilization: General/Acute Care Discharges per 1,000 MM;
- HEDIS® Outpatient Visits per 1,000 Member Months; and
- HEDIS® ED Use per 1,000 Member Months.

The STAR MCO Program has higher inpatient, outpatient, and ED utilization for its enrollees compared to enrollees in Medicaid plans reporting to NCQA. STAR MCO inpatient utilization was 9.96 discharges per 1,000 member months (MM) compared to 8.2 discharges per 1,000 MM for the HEDIS® mean. Further analysis of STAR MCO data reveals that enrollees with major chronic medical conditions are potentially contributing to high inpatient utilization. (See the Texas Mediciad Managed Care STAR Financial Performance Measures Chart Book for further detail.)[20] However, no information is available from NCQA to determine if these differences are potentially related to differences in enrollee case-mix.

The STAR MCO Program outpatient utilization rate was 413.56 per 1,000 MM compared to the HEDIS® mean of 279.50 per 1,000 MM. The greatest difference between STAR MCO Program performance and the performance of Medicaid programs reporting to NCQA occurs in ED use. The ED use for all STAR MCOs (104.85 per 1,000 MM) is almost double the rate reported by MCOs participating in HEDIS® at 49.50.

On average, STAR+PLUS MCO Program enrollees have greater inpatient, outpatient, and ED utilization compared to the average use for Medicaid plans reporting to NCQA. For STAR+PLUS enrollees, there were 27.88 discharges/1,000 MM compared to the HEDIS® 2004 mean of 8.20 discharges/1,000 MM. This higher inpatient utilization is most likely due to the health status of the STAR+PLUS enrollee pool.

The overall STAR+PLUS Program outpatient utilization rate, 542.37 per 1,000 MM, was almost twice that of the HEDIS® mean of 279.50 per 1,000 MM. As with the STAR MCO Program, the greatest difference between STAR+PLUS Program performance and the performance of Medicaid programs reporting to NCQA occurs in ED use. ED use for all STAR+PLUS MCOs (124.91 per 1,000 MM) is two and a half times the rate reported by MCOs participating in HEDIS® at 49.50. Notably, ED use rates are highest among those with major chronic conditions and new enrollees.

Three programs evaluated by the EQRO, CHIP, STAR MCO, and NorthSTAR, performed below the NCQA mean for the indicator:

- HEDIS® Mental Health Utilization-Members Receiving Inpatient, Day/Night, and Ambulatory Services

The overall mental health utilization rates for enrollees in CHIP, STAR MCO, and NorthSTAR were 4.80, 3.78, and 3.19 percent, respectively. These figures are each almost half the HEDIS® mean of 7.10 percent. However, it should be noted that some mental health services, such as rehabilitation services, are not included in this indicator. Therefore, these data may not be indicative of all mental health service utilization for these programs. Even when NorthSTAR-specific services are added into the NorthSTAR mental health utilization rates, the addition of NorthSTAR-specific services adds less than a half a percent to the percentage of NorthSTAR enrollees utilizing mental health services increasing utilization from 3.19 percent to 3.62 percent. Mental health utilization for NorthSTAR enrollees still falls short of the average utilization for Medicaid plans reporting to NCQA.

For the use of services category, the EQRO has the following recommendations:

1. Review ED utilization for the STAR MCO Program and the STAR+PLUS Program.
2. For the NorthSTAR Program, review the managed behavioral health care organization policies and practices to ensure adequate access for consumers with mental health needs.

Access and Availability of Care

Table 9 shows the indicators assessed in the access and availability of care category and the performance for each of the programs overall relative to the mean score for Medicaid plans reporting to NCQA nationally.

Table 9. Access and Availability of Care Indicators

Indicator	HEDIS® 2004 Mean	CHIP Overall	STAR MCO Program -TANF	STAR MCO Program-SSI	STAR+PLUS Overall	NorthSTAR Overall
HEDIS® Prenatal Care	75.90%	N/A	88.71%	N/A	N/A	N/A
HEDIS® Postpartum Care	54.40%	N/A	55.08%	N/A	N/A	N/A

Access and availability of care is an important area to assess. For example, timely prenatal care is generally accepted as good practice and a measure of quality in clinical care. For those at increased medical and social risk, such as Medicaid enrollees, prenatal care provides intervention and education to reduce or prevent risks and serves as a link to community resources.[21,22] Also,

postpartum care is an important indicator of access and availability of care. Critical issues related to physical and emotional well-being and the promotion of breastfeeding can be addressed during the postpartum visit.[23]

The STAR MCO Program (TANF-only) also performed above the HEDIS® mean for indicators of women's health including:

- HEDIS® Prenatal Care and
- HEDIS® Postpartum Care.

For the prenatal care indicator, there was slight variation in performance among STAR MCOs. Performance for only one MCO, FIRSTCARE, fell below the HEDIS® mean. Sixty-seven percent of pregnant females received prenatal care in their first trimester compared to 76 percent of eligible Medicaid enrollees in programs reporting to the NCQA. It was noted that while the STAR MCO Program performed well on this indicator overall, Texas should consider reviewing the FIRSTCARE results with them to see if additional quality improvement measures are warranted. Also, the percentage of TANF-eligible PCCM and FFS enrollees who received prenatal care fell short of the overall percentage of TANF-eligible STAR MCO Program enrollees who received prenatal care. The percentage of TANF-eligible PCCM and FFS enrollees receiving prenatal care was 85 and 66 percent, respectively.

For postpartum care, there was also a slight variation in performance among STAR MCOs. Superior had the highest percentage of eligible female enrollees who received postpartum care (58 percent). The result for Parkland Community, at 44 percent, is substantially lower than that of the national average of 54 percent. Also, results for PCCM and FFS TANF-eligible enrollees were slightly lower than that of STAR MCO Program TANF-eligible enrollees. The percentage of TANF-eligible PCCM and FFS enrollees receiving postpartum care was 54 and 50 percent, respectively.

A related finding in the MCO Administrative Interviews revealed all STAR MCOs have adopted maternity care clinical care guidelines. Some MCOs offer incentives for completing prenatal education. Future interviews should attempt to assess whether there are differences in use of incentives or use and dissemination of guidelines that may be related to the variation in performance demonstrated by the STAR MCOs.

In review of MCO annual quality program summaries it was noted that all CHIP MCOs have in place ongoing indicators related to member telephone access and provider access and availability to members. For STAR, these ongoing indicators were noted to be in place for 50 percent of MCOs (telephone access) and 80 percent of MCOs (provider access/availability).

In addition, calls made directly to participating provider offices revealed member access to adult and child well care, routine ongoing care, and urgent care was within HHSC standards in excess of 97 percent for STAR, CHIP, and STAR+PLUS providers responding. Only 65 percent of STAR providers and 63 percent of STAR+PLUS providers reported access to prenatal appointments within requirements.

For the access and availability of care category, the EQRO has the following recommendations:

1. Include more detailed assessment of MCO incentive programs and use clinical practice guidelines in future MCO Administrative Interviews to determine the possible relationship to better performance on measures of maternity care access.

Effectiveness of Care

Table 10 shows the indicators assessed in the effectiveness of care category and the performance for each of the programs overall relative to the mean score for Medicaid plans reporting to the National Committee for Quality Assurance (NCQA) nationally.

Table 10. Effectiveness of Care Indicators

Indicator	HEDIS® 2004 Mean	CHIP Overall	STAR MCO Program -TANF	STAR MCO Program-SSI	STAR+PLUS Overall	NorthSTAR Overall
HEDIS® Well-Child Visits in the First 15 Months of Life (Six Visits or More)	44.50%	N/A	46.92%	N/A	N/A	N/A
HEDIS® Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	59.90%	52.96%	66.08%	N/A	N/A	N/A
HEDIS® Adolescent Well Care Visits	37.60%	31.22%	44.53%	N/A	N/A	N/A
HEDIS® Breast Cancer Screening	55.50%	N/A	N/A	45.92%	N/A	N/A
HEDIS® Cervical Cancer Screening	63.50%	N/A	54.32%	35.04%	N/A	N/A
HEDIS® Use of Appropriate Medications for People With Asthma (Ages 5-9)	61.30%	69.24%	68.00%	N/A	75.00%	N/A
HEDIS® Use of Appropriate Medications for People With Asthma (Ages 10-17)	61.40%	66.64%	66.00%	N/A	56.96%	N/A
HEDIS® Use of Appropriate Medications for People With Asthma (Ages 18-56)	65.40%	N/A	52.30%	N/A	57.20%	N/A
HEDIS® Follow-Up After Hospitalization for Mental Illness (7 day)	37.00%	33.58%	35.90%	75.08%	31.92%	24.29%* 37.97%**
HEDIS® Follow-Up After Hospitalization for Mental Illness (30 day)	55.80%	61.58%	63.35%	88.73%	64.18%	47.66%* 59.38%**
Readmission Within 30 Days After An Inpatient Stay for Mental Health	N/A	12.68%	11.23%	18.60%	29.42%	12.58%
HEDIS® Comprehensive Diabetes Care (Eye Exams)	44.10%	N/A	18.61%	23.74%	23.89%	N/A
HEDIS® Comprehensive Diabetes Care (Diabetic Nephropathy)	43.10%	N/A	33.14%	41.78%	28.87%	N/A
HEDIS® Comprehensive Diabetes Care (HbA1c Testing)	73.90%	N/A	64.73%	74.02%	63.02%	N/A
HEDIS® Comprehensive Diabetes Care (LDL-C Screening)	74.80%	N/A	66.28%	82.97%	75.85%	N/A
HEDIS® Comprehensive Diabetes Care (Poor Control of HbA1c)***	49.50%	N/A	60.07%	N/A	52.85%	N/A
HEDIS® Comprehensive Diabetes Care (LDL-C Control)	47.00%	N/A	50.83%	N/A	66.42%	N/A
HEDIS® Appropriate Testing for Children with Pharyngitis	54.20%	52.71%	44.58%	N/A	N/A	N/A
HEDIS® Controlling High Blood Pressure	58.30%	N/A	55.34%	N/A	60.76%	N/A

* Mental health-specific follow-up; **Any type of follow-up; ***"Poor Control" means a lower rate indicates better performance.

Effectiveness of care is an important area to assess. The use of efficacious or evidence-based practices by managed care organizations can assist in reducing health care costs and improve the overall health and quality of life for enrollees.

Within the effectiveness of care category, CHIP in Texas performed better than the mean for Medicaid health plans reporting nationally on two indicators of effectiveness of care in children's health. These indicators include:

- HEDIS® Use of Appropriate Medications for People With Asthma (Ages 5-9) and
- HEDIS® Use of Appropriate Medications for People With Asthma (Ages 10-17).

Sixty-nine percent of CHIP enrollees ages five through nine with asthma received appropriate asthma medications compared to 61 percent of enrollees with asthma of Medicaid plans reporting to NCQA. Sixty-seven percent of children with asthma, ages 10 through 17, received appropriate medications compared to the national average of 61 percent. There was little variation among MCO performance for the asthma indicators.

Within the effectiveness of care category, the STAR MCO Program performed better than the mean for health plans reporting nationally on several indicators of effectiveness of care in children's health for TANF-eligible enrollees. These indicators include:

- HEDIS® Well-Child Visits in the First 15 Months of Life (Six Visits or More);
- HEDIS® Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life;
- HEDIS® Adolescent Well Care Visits;
- HEDIS® Use of Appropriate Medications for People With Asthma (Ages 5-9); and
- HEDIS® Use of Appropriate Medications for People With Asthma (Ages 10-17).

There was some variation for each of the STAR MCO Program child and adolescent well care indicators by individual MCO; however, all plans were at or above the HEDIS® mean for these indicators. In depth information on variation in MCO performance can be found in the Texas Medicaid Managed Care STAR Quality of Care Measures Chart Book for fiscal year 2005.[24]

Overall, STAR MCOs exceeded the HEDIS® 2004 mean for both children and adolescents for the asthma indicator. Sixty-eight percent of STAR TANF enrollees, ages five through nine, received appropriate asthma medications compared to 61 percent of enrollees of Medicaid plans reporting to NCQA. Sixty-six percent of adolescents, ages 10 through 17, received appropriate medications compared to the national average of 61 percent. With the exception of Community Health Choice's performance with both children and adolescents, all STAR MCOs performed better than the HEDIS® average for both age groups. A related finding in the MCO Administrative Interviews revealed all STAR MCOs have adopted asthma clinical care guidelines and are active in disseminating them to providers and members.

All programs evaluated by the EQRO (CHIP, STAR MCO (both TANF and SSI), STAR+PLUS, and NorthSTAR) performed better than the mean for health plans reporting nationally on the following indicator:

- HEDIS® Follow-Up After Hospitalization for Mental Illness (30 day).

Also, two programs, STAR MCO (SSI) and NorthSTAR, performed better than the mean for health plans reporting nationally on the companion mental health indicator:

- HEDIS® Follow-Up After Hospitalization for Mental Illness (7 day).

Overall, the results for follow-up care after a mental health inpatient stay are positive for all Texas managed care programs relative to Medicaid plans reporting to NCQA. While some variation in

performance exists among program MCOs, all MCOs should be provided encouragement to continue to perform well on this measure to ensure continued high quality of care for this vulnerable population. Specifically, one CHIP MCO, Seton, continues to lag behind the performance of other health plans with approximately 20 percent of their enrollees having an outpatient follow-up within seven days of discharge.

There were some effectiveness of care indicators in which most or all Texas managed care programs performed below the HEDIS® mean. These indicators include the following:

- HEDIS® Breast Cancer Screening;
- HEDIS® Cervical Cancer Screening;
- HEDIS® Use of Appropriate Medications for People With Asthma (Ages 18-56);
- HEDIS® Comprehensive Diabetes Care (Eye Exams);
- HEDIS® Comprehensive Diabetes Care (Diabetic Nephropathy);
- HEDIS® Comprehensive Diabetes Care (HbA1c Testing);
- HEDIS® Comprehensive Diabetes Care (poor HbA1c Control – actual value higher, which is poorer performance);
- HEDIS® Appropriate Testing for Children with Pharyngitis; and
- HEDIS® Controlling High Blood Pressure.

For the women's health indicators, the STAR MCO Program performed below the HEDIS® mean for breast cancer screening for SSI-eligible enrollees and below the national mean for cervical cancer screening for both TANF and SSI-eligible enrollees. Nationally, among Medicaid plans reporting to NCQA, 56 percent of female enrollees age 50 and older were screened for breast cancer. Forty-six percent of STAR MCO SSI enrollees had a mammogram. The results ranged from a low of 38 percent of enrollees in Amerigroup and Community Health Choice to a high of 70 percent of enrollees in El Paso First.

Fifty-four percent of female TANF enrollees and 35 percent of female SSI enrollees between the ages of 21 and 64 were screened for cervical cancer compared to 64 percent of female enrollees in Medicaid plans reporting to NCQA. In the STAR MCO Program, there was some variability among health plan performance for both TANF and SSI enrollees. Texas Children's exhibited the lowest percent of women receiving cervical cancer screening for both TANF and SSI enrollees (41 percent and 21 percent, respectively).

A related finding in the MCO Administrative Interviews revealed no STAR MCOs have adopted clinical care guidelines specific to these screening elements of importance in women's health.

For three components of the comprehensive diabetes care indicator, both TANF and SSI-eligible STAR MCO Program enrollees and STAR+PLUS enrollees performed below Medicaid programs reporting to NCQA. For both TANF and SSI enrollees in the STAR MCO Program, there was wide variation among the administrative components of diabetes care measured. However, overall, a higher percentage of SSI enrollees received all four components of diabetes care compared to TANF enrollees. For SSI enrollees, two of the measures, HbA1c testing and LDL-C screening, either approximated or exceeded the HEDIS® mean. The remaining two administrative measures for SSI enrollees and all four administrative measures for TANF enrollees fell short of the HEDIS® average, indicating an opportunity for improvement.

For the STAR+PLUS Program, there was variation among the components of diabetes care measured using administrative data. During fiscal year 2005, 29 percent of STAR+PLUS enrollees with diabetes received monitoring for diabetic nephropathy compared to 43 percent of enrollees in Medicaid programs reporting to NCQA. Sixty-three percent of enrollees received HbA1c testing compared to the HEDIS® mean of 74 percent. Twenty-four percent of enrollees received appropriate

eye exams compared to the HEDIS® mean of 44 percent. The STAR+PLUS mean of 76 percent across both plans exceeded the HEDIS® mean for LDL-C testing (75 percent) and for control of LDL-C (63 percent). While neither STAR+PLUS MCO achieved the HEDIS® mean for poor control of HbA1c (a lower score is better performance), Evercare was within one percentage point of the mean at 51 percent.

A related finding in the MCO Administrative Interviews revealed all STAR and STAR+PLUS MCOs have adopted diabetes clinical care guidelines and are active in disseminating them to providers and members. Most also have active disease management programs for diabetes. Future interviews should include questions aimed at identifying differences in these programs that might be related to the variation in MCO performance noted in the diabetes measures.

Both CHIP and STAR performed below the HEDIS® mean for the percentage of children who received appropriate testing for pharyngitis. Overall, 53 percent of CHIP enrollees with pharyngitis received appropriate Group A streptococcus testing. This figure approaches the HEDIS® 2004 mean of 54 percent and exceeds the 47 percent of CHIP enrollees who received appropriate testing in the previous year's chart book.

Findings for this reporting period continue to show a great deal of variability among CHIP MCOs. At 68 percent, Texas Children's Health Plan had the highest percentage of children receiving appropriate testing for the fiscal year. A related finding in the MCO Administrative Interviews revealed Texas Children's Health Plan was the only MCO to have adopted clinical care guidelines for treating pharyngitis. Driscoll had the lowest percentage of enrollees who received appropriate testing. Thirty-three percent of Driscoll child enrollees with pharyngitis received appropriate testing for the fiscal year.

Overall, 45 percent of TANF-eligible children enrolled in the STAR MCO Program who were diagnosed with pharyngitis received appropriate Group A streptococcus testing. This is lower than the HEDIS® mean of 54 percent. Results for TANF-eligible PCCM enrollees were lower than that of STAR MCO Program enrollees (41 percent compared to 45 percent). Results for TANF-eligible FFS enrollees were higher than that of enrollees in the STAR MCO Program (52 percent compared to 45 percent). These findings show a great deal of variability among the STAR MCOs. Community First and Texas Children's had the highest percent of children who received appropriate testing (53 percent and 49 percent, respectively). El Paso First had the lowest percentage of enrollees who received appropriate testing (29 percent).

One effectiveness of care indicator did not have a HEDIS® comparison. This indicator was:

- Readmission Within 30 Days After An Inpatient Stay for Mental Health.

There was variation among the Texas Medicaid programs with respect to this indicator which measures efficacy of mental health care. The percentage of enrollees who were readmitted to an inpatient setting after a mental health hospitalization ranged from 11 percent of STAR MCO Program TANF-eligible enrollees to 29 percent of STAR+PLUS enrollees.

For the effectiveness of care category, the EQRO has the following recommendations:

1. Increase provision of preventive care to CHIP enrollees ages three through six.
2. Increase provision of preventive care to adolescents enrolled in CHIP in Texas.
3. Use the next MCO Administrative Interview process to more fully identify clinical practice guidelines in place related to quality measures as well as to more fully define elements of care/disease management programs in place for these clinical groups.

4. Identify plans that have performed well on the indicator "Readmission Within 30 Days After an Inpatient Stay for Mental Health" and request that they analyze and disseminate successful strategies. This recommendation is for CHIP, STAR, and STAR+PLUS.
5. Develop strategies to increase appropriate testing of children presenting to primary care physicians with sore throats for CHIP and STAR MCO enrollees.
6. Develop strategies to increase breast cancer screening rates for STAR MCO Program enrollees.
7. Develop strategies to increase cervical cancer screening rates among the STAR MCO Program. Texas HHSC should consider identifying successful strategies employed in the PCCM and FFS programs and applying them to the STAR MCO Program.
8. Request the two STAR+PLUS health plans to develop strategies to improve compliance with recommended diabetes screening.

Health-Based Risk Analysis

ICHP conducts health-based risk analyses to support HHSC in their rate setting for STAR, STAR+PLUS, and CHIP MCOs. In the risk analyses, ICHP calculates the MCOs' actual health care expenditures and compares them to the expenditures that are expected based on the illness burden or case-mix of the MCOs' enrollee pools. The actual to predicted expenditures are expressed as spending ratios with the value of one indicating perfect agreement between predicted and actual expenditures. Values less than one indicate possible under-spending relative to the case-mix and values over one indicate possible over-spending.

ICHP also provides estimates of each MCO's acuity level using risk (case-mix) ratios that are interpreted in the same way as the spending ratios. MCOs have been compared to the overall statewide pool of beneficiaries within a program (i.e., STAR MCOs or CHIP) and have been compared to other MCOs operating in the same Service Delivery Area (SDA) using the risk ratio concept.

In general, ICHP uses two measures to characterize enrollees' health status and to create the previously described ratios. The first measure used is the Chronic Disability Payment System (CDPS).[25] The system hierarchically groups International Classification of Diseases 9th Revision-Clinical Modification (ICD-9 CM) codes into 19 major diagnostic categories according to the expected costs and clinical implications associated with the condition. The 19 CDPS categories correspond to body systems or type of diagnosis and are further divided into high, medium, and low cost categories. The CDPS was developed using Medicaid claims data employing information from Temporary Assistance for Needy Families (TANF) and Supplemental Security Income (SSI) recipients including both adults and children. The system is used in seven states to make risk-adjusted capitated payments to health plans caring for Medicaid beneficiaries.[26] ICHP uses the CDPS (1) to characterize the illness burden or case-mix of each MCO relative to the overall pool of Texas enrollees in a program, service area, or risk group and (2) to characterize the MCOs' actual health care expenditures relative to their expected expenditures based on their enrollee case-mix.

The second measure used to characterize enrollees' health status is the Clinical Risk Groups (CRGs).[27] The CRGs is a clinical system that classifies individuals into mutually exclusive health status categories. The nine core CRG health status categories are ordered from least to most complex conditions. The first core CRG group, "healthy," includes those with no health care use and those with minor acute illnesses such as upper respiratory infection. The second CRG category, "significant acute," is comprised of serious acute illnesses, such as meningitis, that may place the patient at risk for developing a chronic condition. The rest of the core CRG categories represent chronic conditions with increasing complexity, ranging from minor chronic (such as chronic bronchitis and depression), to moderate (such as asthma, schizophrenia, and diabetes) and major chronic

conditions (such as metastatic malignancies, organ transplant, and cystic fibrosis). The nine core CRG health status categories were further collapsed into five groups for the ease of presentation to diverse audiences. The risk profiles created by using five CRG groups help in understanding the illness burden within each MCO and place the health care expenditures and health care use patterns in the MCO in a context.

Three data sources are used in risk analyses: (1) person-level enrollment information (2) person-level eligibility information and (3) person-level health care claims/encounter data. The enrollment files contain information about the person's age, gender, the MCO in which the person is enrolled, the service area the person resided, and the number of months the person was enrolled in the program. The eligibility files contain information about the person's risk groups. The person-level claims/encounter data contains Physician's Current Procedural Terminology (CPT) codes, International Classification of Diseases, 9th Revision (ICD 9-CM) codes, and actual paid amounts, and other information necessary for risk analysis.

ICHP devoted significant time and effort to developing Texas specific weights that are used in the calculation of the spending ratios and the risk ratios. Although the CDPS provides national weights derived from Medicaid claims data from throughout the United States, the developers suggest that large states, such as Texas, can use their own specific weights. The advantage to state-specific weights is that they reflect the practice patterns and contractual arrangements that are unique to that state rather than general national trends.

The development of Texas-specific regression coefficients for the STAR MCO Program and for CHIP incorporated the following procedure. First, two years of data for each program were pooled. This provided the means to work with a large sample of observations in each of the CDPS categories and to develop stable regression coefficients. Second, weighted regression models were used to depict expected expenditures per member per month. Third, several runs of the regression models were conducted to address negative and illogical coefficients. After conferring with CDPS developers, CDPS categories were collapsed to address negative and illogical coefficients. For example, in the STAR MCO prospective model for TANF adults, central nervous system disorders with high costs were collapsed with central nervous system disorders with medium costs. In a few cases, negative coefficients (such as disorders of the eye with low and very low costs for TANF adults in the prospective model) persisted after collapsing CDPS categories. In this case, these CDPS categories were combined with the reference group (i.e., males in the 25 to 44 year age cohort for TANF adults).

The steps mentioned above were repeated for prospective (models using diagnostic information in one year to predict health care expenditures in a subsequent year) and concurrent (models using diagnostic information in one year to predict expenditures in the same year) regression models. For the STAR MCO Program, separate regression models were estimated for adults and children. As a result, for the STAR MCOs, four sets of Texas-specific coefficients (i.e., prospective weights for adults, prospective weights for children, concurrent weights for adults, and concurrent weights for children) were estimated. Similarly, for CHIP, two sets of Texas-specific coefficients (i.e., prospective weights for children and concurrent weights for children) were estimated. These Texas-specific weights and goodness of fit statistics were presented to HHSC in a document called "Texas CDPS Analysis Specifications."

The CDPS risk analysis for STAR+PLUS relied on national regression coefficients provided by the CDPS developers. The relatively small disabled population served by STAR+PLUS made it impossible to obtain stable Texas-specific weights for SSI enrollees. STAR+PLUS CDPS analysis conducted by ICHP focused on acute health care expenditures for Medicaid-only beneficiaries.

The Texas-specific regression coefficients developed for STAR MCO and CHIP were subsequently used for the CDPS analysis by state-defined risk groups (i.e., TANF adults, TANF children, pregnant women, expansion children, and so on). Similarly, national regression coefficients for disabled populations provided by CDPS developers were used to conduct STAR+PLUS analysis by risk groups. Separate CDPS analyses were conducted for each risk group within a program.

Table 11 shows the risk groups used in the STAR MCO, CHIP, and STAR+PLUS analyses.

Table 11. Risk Groups Used in the CDPS Analyses

Program	Risk Groups
STAR MCO	TANF Newborns
	TANF Children
	TANF Adults
	Pregnant Women
	Regular Newborns
	Expansion Newborns
	Expansion Children
	Federal Mandate Children
CHIP	Less than 1 Year of Age
	Ages 1 to 5
	Ages 6 to 14
	Ages 15 to 18
STAR+PLUS	Medicaid Only – Community-Based Alternatives
	Medicaid Only – Other Community Clients

Monthly risk group information found in the State eligibility files were used to identify the beneficiaries' state-defined risk group for STAR MCO and STAR+PLUS. In general, each beneficiary is assigned to a risk group based on the monthly risk group that person is assigned the majority of time during a reporting period. There is one exception to this rule. Having at least one monthly assignment to one of the risk groups for newborns or pregnant women is a sufficient condition for being classified under those risk groups. Age of the beneficiary is used for risk group determination for CHIP. Age of a beneficiary is determined as of the end of the reporting period.

Most of the risk group specific CDPS analyses used prospective weights. Specifically, prospective weights were used in the CDPS analyses for the following STAR MCO state-defined risk groups: (1) TANF Children, (2) TANF Adults, (3) Expansion Children, and (4) Federal Mandate Children. Similarly, prospective weights were used in all CHIP risk group analyses with the exception of 'Less than 1 Year of Age' risk group and in all STAR+PLUS risk group analyses.

For newborns and pregnant women, most of the health care expenditures are incurred concurrently. As a result, CDPS analyses for STAR risk groups with newborns and pregnant women (i.e., TANF Newborns, Regular Newborns, Expansion Newborns, and Pregnant Women) and the CHIP risk group for those less than 1 year of age relied on concurrent weights.

To support HHSC in their rate setting analysis for STAR, STAR+PLUS, and CHIP MCOs, results from the CDPS analysis were presented by MCO and by MCO within service area for each risk group. Excel spreadsheets were used to provide these results to HHSC. Tables in the Excel spreadsheets included information on (1) the number and percent of enrollees by MCO (or by MCO within service area), (2) actual per member per month health care expenditures based on paid amounts as reported in claims/encounter databases, (3) predicted per member per month health care expenditures derived from CDPS analysis taking into account the case-mix, (4) the case-mix,

and (5) the spend ratio. As previously described, the case-mix refers to the health status of the MCO's enrollee pool in a given risk group in comparison to the total enrollee pool in that risk group. A case-mix of less than one indicates the MCO has a healthier population in a given risk group relative to the overall pool in that risk group. Likewise, a number over one indicates that the MCO has a sicker population in a given risk group than the overall enrollee pool in the risk group. The spend ratio refers to the amount the MCO spent on health care expenditures using their reported paid amounts relative to the expected expenditures based on their enrollee pool case-mix in a given risk group. As discussed above, the derivation of expected expenditures within a risk group relied on Texas-specific weights for STAR MCO and CHIP and national weights for STAR+PLUS. Values of spend ratio under one indicate under-spending relative to the case-mix and values over one indicate over-spending relative to the case-mix. Examples of the analyses using the CDPS are provided in the following sections.

STAR MCO

Table 12 shows MCOs with the healthiest and sickest enrollee pools within each STAR MCO risk group. These results are based on fiscal year 2005 claims and encounter data.

Table 12. MCOs with Healthiest and Sickest Enrollee Pools within STAR MCO Risk Groups

	STAR MCO Risk Groups							
Case-Mix	**TANF Newborns**	**TANF Children**	**TANF Adults**	**Pregnant Women**	**Regular Newborns**	**Expansion Newborns**	**Expansion Children**	**Federal Mandate Children**
Healthiest Enrollee Pool	Community Health Choice	Parkland Community	Texas Children's	Texas Children's	Community Health Choice; Texas Children's	Community Health Choice	Superior	Parkland Community
Sickest Enrollee Pool	Community First	Community First	FIRSTCARE	Community Health Choice	Parkland Community	FIRSTCARE	Parkland Community	FIRSTCARE

As indicated in the table above, Community Health Choice had the healthiest enrollee pool for all risk groups related to newborns. Further, Texas Children's had the healthiest enrollee pool in three (i.e., TANF Adults, Pregnant Women, and Regular Newborns) out of the eight STAR MCO risk groups. FIRSTCARE had the sickest enrollee pool in three (i.e., TANF Adults, Expansion Newborns, and Federal Mandate Children) out of the eight STAR MCO risk groups.

Key points related to spend ratio by STAR MCOs within each risk group are as follows:

1. Community First has the highest spend ratio coupled with the highest case-mix within TANF Newborns.
2. Texas Children's has the highest spend ratio but the healthiest case-mix within TANF Adults. Community Health Choice showed the same pattern within Regular Newborns.
3. FIRSTCARE has the highest spend ratio but average case-mix within Pregnant Women. El Paso First showed a similar pattern with an almost average case-mix within Federal Mandate Children.
4. El Paso First has the highest spend ratio within TANF Children, Texas Children's has the highest spend ratio within Expansion Newborns, and Parkland Community has the highest spend ratio within Expansion Children. However, all of these MCOs have only slightly above average case-mix within these risk groups.

CHIP

Table 13 shows MCOs with the healthiest and sickest enrollee pools within each CHIP risk group. These results are based on fiscal year 2005 claims and encounter data.

Table 13. MCOs with Healthiest and Sickest Enrollee Pools within CHIP Risk Groups

Case-Mix	CHIP Risk Groups			
	Less than 1 Year of Age	Ages 1 to 5	Ages 6 to 14	Ages 15 to 18
Healthiest Enrollee Pool	FIRSTCARE, El Paso First	El Paso First	Amerigroup	Amerigroup; Community First
Sickest Enrollee Pool	Seton	Parkland Community; Superior EPO	Mercy; Driscoll	Superior EPO

As indicated in the table above, El Paso First had the healthiest enrollee pool for risk groups less than six years of age and Amerigroup had the healthiest enrollee pool for risk groups six years of age and above. Superior EPO had the sickest enrollee pool in two (i.e., Ages 1 to 5 and Ages 15 to 18) out of the four CHIP risk groups.

Key points related to spend ratio by CHIP MCOs within each risk group are as follows:

1. Parkland Community has the highest spend ratio coupled with the highest case-mix within the Ages 1 to 5 risk group.
2. Texas Children's has the highest spend ratio but only an average case-mix within the Ages 6 to 14 and Ages 15 to 18 risk groups.

STAR+PLUS

Table 14 shows MCOs with the healthier and sicker enrollee pools within each STAR+PLUS risk group. These results are based on fiscal year 2005 claims and encounter data.

Table 14. MCOs with Healthier and Sicker Enrollee Pools within STAR+PLUS Risk Groups

Case-Mix	STAR+PLUS Risk Groups	
	Medicaid Only – Community-Based Alternatives	Medicaid Only – Other Community Clients
Healthier Enrollee Pool	Evercare	Amerigroup
Sicker Enrollee Pool	Amerigroup	Evercare

As indicated in the table above, while Evercare has a healthier enrollee pool for the Medicaid Only, Community-Based Alternatives risk group, Amerigroup has a slightly healthier enrollee pool for the Medicaid Only, Other Community Clients risk group.

Key points related to spend ratio by STAR+PLUS MCOs within each risk group are as follows:

1. Evercare has a higher spend ratio but below average case-mix within the Medicaid Only, Community-Based Alternatives risk group.
2. Evercare has a higher spend ratio but only slightly above average case-mix within the Medicaid Only, Other Community Clients risk group.

Additional information used in rate setting was provided for STAR, STAR+PLUS, CHIP, and NorthSTAR in lag reports organized by MCO, service area, and risk group. The lag reports contribute to the understanding of patterns in claims payment for various subsets of each MCO's membership. The reports track the dollar value of claims submitted with the dollar value of claims paid in the months following the initial dates of service.

Ad Hoc Reporting

General Ad Hoc Reports

In addition to conducting the mandatory and optional external quality review for Texas Medicaid Managed Care and CHIP, ICHP also produced ad hoc reports at the request of HHSC to address specific needs. These reports cover a range of topics that become of interest from time to time in the management and oversight of these programs. Review of these requests from year to year may provide some insight into activities that should be considered for incorporation into the regular external review schedule. **Table 15** lists the topics and dates delivered for the general ad hoc reports produced during fiscal year 2005.

Table 15. General Ad Hoc Reports for Fiscal Year 2005

Ad Hoc Request	Ad Hoc Description	Delivery Date
THSteps Annual Encounter Data Request	Updated encounter data file for use in tracking THSteps	9/13/2004
STAR Premature and Live Births	Provide number of premature and live births to members in MCO six months prior and six months following birth.	10/4/2004
Emergent Care Request – STAR	Use and costs for emergent care for STAR	10/20/2004
HIV in Texas Medicaid Managed Care	Number of members in STAR and PCCM with HIV diagnosis	11/9/2004
STAR+PLUS "2E" Plan Code – Harris	Number of STAR+PLUS PCCM clients in Harris County	11/10/2004
CHIP Disenrollee Cross Tabs	Additional analysis of CHIP Disenrollee Survey results	12/2/2004
Children with Special Health Care Needs	Proposal for monitoring and assessing health care services for CSHCN	1/5/2005
Foster Care – initial request	Percent and distribution of enrollees (foster care/not foster care) by CRG categories	1/5/2005
Foster Care – follow up	Actual to predicted expenditures for foster care group compared to non-foster care children in PCCM/SSI	1/11/2005
CAHPS Health Plan Survey Cluster Scores – CHIP	MCO comparison on selected CAHPS Health Plan Survey cluster scores	1/21/2005
CAHPS Health Plan Survey Cluster Scores – STAR, PCCM, and STAR+PLUS	Comparison on selected adult CAHPS Health Plan Survey items as cluster scores to NCQA findings	1/25/2005
Hill Country Comparison	Baseline and comparative performance data on the Hill Country service area, relative to other Texas service areas (compare MCO, PCCM, FFS); used 18 measures reported in Quality of Care chart book.	2/4/2005
Year 2 EQRO Deliverables	Updated list of EQRO Contract Year 2 deliverables submitted and pending; first provided in July 2004.	2/9/2005
Year 1 EQRO Deliverables	List of EQRO Contract Year 1 deliverables submitted.	2/11/2005
Data Quality Review Process	Summary of ICHP encounter data quality review processes and time frames	2/14/2005
Health care disparity	Spreadsheets calculated to display disparity by racial and ethnic groups.	2/18/2005
Health care disparity chart books	Chart books for STAR and STAR+PLUS with further discussion of disparity findings	2/23/2005
HCFA 416 Ad Hoc	Federal Fiscal Year/State Fiscal Year 2004 Encounter Data including county level data for Frew report	3/9/2004
ACSC Code List	Ambulatory Care Sensitive Condition codes used in ICHP reporting with response to analytical needs	3/18/2005

Ad Hoc Request	Ad Hoc Description	Delivery Date
Classifying Race and Ethnicity	Response to questions regarding percent of race and ethnicity reported and impact on disparity analysis	3/22/2005
Florida KidCare Dental Performance Measures	In response to request for suggestions for dental performance measures for CHIP	3/31/2005
CHIP Dental Performance Measures	Feedback provided on proposed CHIP dental performance measures.	4/4/2005
Emergency Room Use	ER utilization for STAR, STAR+PLUS, and PCCM	4/23/2005
PCCM Report Card	28 performance measures for PCCM	4/27/2005
Disparity Report 2	Revised version of the disparity report with supporting data and articles	4/28/2005
CHIP Immunization Data	Current estimate of vaccine compliance in the CHIP program that can be easily compared to results reported in the 2002 report "Quality of Care: CHIP in Texas". Produce charts as on pages 98 and 100 on 2002 report. Include any relevant, succinct analysis of findings.	6/3/2005

Financial Reporting

During fiscal year 2005, ICHP also produced reports to specifically address issues raised during financial analysis activities by HHSC. **Table 16** lists the topics and dates delivered for the financial ad hoc reports produced during fiscal year 2005.

Table 16. Financial Ad Hoc Reports for Fiscal Year 2005

Ad Hoc Request	Ad Hoc Description	Delivery Date
STAR Case Mix and Expenditures	Asked to provide key points on the topic of comparing case-mix among STAR MCOs.	10/1/2004
Emergent Care Request – STAR	Use and costs for emergent care for STAR	10/20/2004
CRG – Travis County	CRG distributions for Superior in Travis County	11/21/2004
Encounter data resubmission	STAR, STAR+PLUS, and CHIP resubmitted encounter data with STAR DRG grouped.	2/14/2005
Encounter data resubmission	CHIP and STAR+PLUS DRG grouped.	2/23/2005
Report on problem identified with ability to use STAR+PLUS data	Not an ad hoc – report made to HHSC regarding delay in preparing STAR+PLUS reports due to issue being worked by HHSC with data.	3/15/2005
Format for reporting financial data	Submitted sample table with calculations, plan profits, case-mix, spend ratios, and quality of care measures for HHSC approval.	3/17/2005
Confirm STAR+PLUS data issue	Table to support identified issues in conflict matching encounter data with STAR+PLUS MCO FSRs	3/17/2005
STAR MCO Analysis	STAR MCO results by plan, risk group, and SDA with and without newborns and pregnant women	4/11/2005
STAR and PCCM Analysis	STAR and PCCM results by plan, risk group, and SDA with and without newborns and pregnant women	4/11/2005
CHIP MCO Analysis	CHIP MCO results by plan and risk group	4/27/2005
STAR Plan Profit Analysis	STAR MCO plan profit calculations	5/2/2005
STAR Plan Profit Analysis – revised	Revised STAR MCO plan profit calculations	5/5/2005
Ungroupable DRGs	Analysis of DRGs not able to be grouped in financial analysis	5/10/2005
CHIP CDPS by CSA	Analysis of CHIP CDPS by CSA	5/26/2005

Summary

In summary, the data quality in the STAR MCO, STAR+PLUS, and CHIP programs is very good and continues to improve as evidenced by the Data Certification and Data Validation reports. These data are used in calculating HEDIS® quality of care measures and also are used by HHSC in its rate setting work. MCOs participating in Texas Medicaid and CHIP demonstrate significant compliance with federal and state requirements for these programs and have in place the structure and processes needed to deliver quality care and service to enrollees. Overall, the quality of care in Texas Medicaid Managed Care and CHIP is also good as evidenced by the member survey scores and ongoing quality of care indicators. Where indicated, HHSC and the participating MCOs have identified opportunities for improvement in care and service. Some specific areas were identified for ongoing improvement and are documented in the body of the report.

Texas is implementing a Value Based Purchasing approach in Medicaid Managed Care and CHIP in September 2006. This approach will increase the interaction of participating MCOs and HHSC in defining goals for improvement and measuring success as the MCOs work to continuously improve. Results from ongoing external quality review provide a foundation for this move to continuous improvement.

Notes

[1] Texas Health and Human Services Commission, 2002. Medicaid/CHIP External Quality Review Organization Request for Proposal.

[2] The US Department of Health and Human Services first proposed regulations to specify these standards in a Notice of Proposed Rulemaking published in the Federal Register on September 29, 1998, and in a final regulation issued in the Federal Register on January 19, 2001. The final regulations published in the Federal Register on June 14, 2002, amended the Medicaid managed care regulations published on January 19, 2001.

[3] Department of Health and Human Services Centers for Medicare & Medicaid Services, 2003. *Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al.* Final Protocol Version 1.0.

[4] Department of Health and Human Services, Centers for Medicare and Medicaid Services, 2002. *Validating Encounter Data: A Protocol for Use in Conducting External Quality Review of Medicaid Managed Care Organizations and Prepaid Health Plans.*

[5] Institute for Child Health Policy, 2006. Annual Chart Book Fiscal Year 2005 Texas Medicaid Managed Care STAR Quality of Care Measures.
Institute for Child Health Policy, 2006. Annual Chart Book Fiscal Year 2005 Texas Medicaid Managed Care STAR Financial Performance Measures.
Institute for Child Health Policy, 2006. Annual Chart Book Fiscal Year 2005 Texas Children's Health Insurance Program Quality of Care Measures.
Institute for Child Health Policy, 2006. Annual Chart Book Fiscal Year 2005 Texas Children's Health Insurance Program Financial Performance Measures.
Institute for Child Health Policy, 2006. Annual Chart Book Fiscal Year 2005 Texas Medicaid Managed Care STAR+PLUS Quality of Care Measures.
Institute for Child Health Policy, 2006. Annual Chart Book Fiscal Year 2005 Texas Medicaid Managed Care STAR+PLUS Financial Performance Measures.
Institute for Child Health Policy, 2006. Annual Chart Book Fiscal Year 2005 NorthSTAR Program Quality of Care Measures.

[6] The information that NCQA compiles for Medicaid Managed Care Programs can be viewed at www.ncqa.org.

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[20] Institute for Child Health Policy, Annual Chart Book Fiscal Year 2005 STAR Managed Care Organization Financial Performance Measures, April 2006.

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