VALIDATING ENCOUNTER DATA:
Texas Medicaid Managed Care
and
Children's Health Insurance Program
Managed Care Organization
Medical Record Review
Fiscal Year 2006

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Overview

Report Title:	**VALIDATING ENCOUNTER DATA: Texas Medicaid Managed Care and Children's Health Insurance Program, Managed Care Organization Medical Record Review, Fiscal Year 2006**
Measurement Period:	**January 2006 – March 2006**
Date Submitted By EQRO:	**January 4, 2008**

Purpose

This report presents the methodology and findings of the study conducted in fiscal year 2007 to validate the Texas STAR and STAR+PLUS Medicaid programs and the Children's Health Insurance Program (CHIP) claims and encounter data. Managed Care Organizations (MCOs) in the three programs and an Exclusive Provider Organization (EPO) in CHIP submitted the data used in this report. More specifically, the intent of this report is to:

- describe the methodology used to validate MCO/EPO fiscal year 2006 claims and encounter data against documentation in the MCO/EPO enrollee medical records,
- present a date of service encounter match rate as well as provider, diagnosis, and procedure match rates for STAR, STAR+PLUS, and CHIP and for each MCO and EPO participating in these programs,
- compare match rates against an incremental improvement target of 80 percent,
- document provider responsiveness to record requests by MCO/EPO,
- describe participating provider satisfaction with the record request and submission process used to obtain medical records for review, and
- compare fiscal year 2006 results with those obtained for prior fiscal years.

Summary of Major Findings

The Institute for Child Health Policy (ICHP), functioning as the Texas External Quality Review Organization (EQRO), conducted the study of fiscal year 2006. While there was variation among MCOs, all programs assessed achieved or exceeded the 80 percent incremental improvement target established for date of service match in this study for the third consecutive year of measurement. Incremental improvement is the goal stated in the CMS protocol. The results of the fiscal year 2006 study support the conclusion that, for most MCOs, the quality of the data is acceptable for use in

measuring quality of care indicators using administrative data and in analysis for reimbursement purposes.

CHIP remained over the 80 percent incremental improvement target for diagnosis match. STAR decreased to 77 percent, falling below the incremental improvement target for the first time in a three year period. STAR+PLUS has yet to achieve the improvement target, remaining at 79 percent for the second consecutive year. As previously noted, the ICHP medical record reviewers adhered to strict criteria to determine a match between the medical record and the claims and encounter data. Thus, the findings presented in this report represent a "worse case" performance.

Some of the study findings were:

- Provider response to record requests exceeded 80 percent for each program in the fiscal year 2006 study.
- Individually, each participating MCO/EPO across all three programs exceeded an 80 percent response rate.
- The match rate between the date of service reported in the claims and encounter data and the medical record was over 85 percent for STAR+PLUS and CHIP in fiscal year 2006.
- The STAR date of service match rate dropped to 82 percent in fiscal year 2006 from 87 percent in fiscal year 2005.
- With one exception, the MCOs participating in both STAR and CHIP continue to demonstrate a higher date of service match for their CHIP product when compared to STAR.
- Provider match rates for all programs remained at 100 percent in fiscal year 2006. This is not surprising with the current study design, where records are requested from a specific provider.
- The diagnosis match rate for all programs decreased from the prior fiscal year with only CHIP remaining above the 80 percent incremental improvement target.
- The procedure match rate improved for STAR+PLUS with STAR and CHIP dropping, but all programs remaining above 80 percent.
- None of the programs demonstrated improvement in under-reporting rates with STAR+PLUS and CHIP increasing while STAR was unchanged.
- Over-reporting rates improved (decreased) for STAR+PLUS and CHIP, but the rate for STAR increased.

- Provider satisfaction with the record review and submission process remained steady with positive responses ranging from 87 to 88 percent for each rating statement.
- The provider satisfaction survey response rate decreased from 57 percent to 52 percent.

EQRO Recommendations

The Texas Health and Human Services Commission may wish to consider the following strategies to maintain and continuously improve the quality of the claims and encounter data in Medicaid Managed Care and CHIP:

- Provide participating MCOs with the results of this study.
- Continue to support ICHP in working directly with participating MCOs in future studies to obtain records from providers not responding.
- Discontinue provider matching when using the current study methodology in the future.
- Continue the incremental improvement target of 80 percent until all programs demonstrate this level for all four match elements.
- Continue to assess provider satisfaction and to solicit suggestions for improvement from providers.

Purpose

The purpose of this report is to present the methodology and findings of the study conducted in fiscal year 2007 to validate claims and encounter data. These data are from Managed Care Organizations (MCOs) participating in the Texas STAR and STAR+PLUS Medicaid programs and MCOs and the Exclusive Provider Organization (EPO) participating in the Texas Children's Health Insurance Program (CHIP). Some MCOs participate in more than one of these programs; however, each program's review and validation are conducted independently.

The Texas Health and Human Services Commission (HHSC) requires claims and encounter data validation annually as an external quality review function. The Institute for Child Health Policy (ICHP) evaluated documentation of care provided to enrollees from January 2006 through March 2006. The Centers for Medicare and Medicaid Services' (CMS) *Protocol for Encounter Data Validation*[1] was used as a guide while developing and implementing this study. The following question was addressed as the primary focus of the study:

- For the STAR, STAR+PLUS, and CHIP programs overall and for each participating MCO or EPO, what is the agreement (match rate) between the electronic claims and encounter data and the medical record encounters for each of the following key documentation elements: a) date of service, b) provider rendering the service, c) diagnosis at the time of the encounter, and d) procedures?

Secondarily, information about the effectiveness of ICHP's review process in terms of obtaining medical records and provider satisfaction was obtained. Specifically, the following questions were addressed:

- For each MCO or EPO in each of the programs (i.e., STAR, STAR+PLUS, and CHIP), what percentage of providers who were asked to submit records did so?
- What is the level of provider satisfaction with the medical record request and submission process?

Background

This is the fifth year ICHP has conducted a claims and encounter data validation study for the State of Texas. The findings from the first evaluation examined the congruence between the contents of the claims and encounter data and the medical record documentation for care provided from May

2002 through July 2002.[2] The second, third, and fourth studies examined documentation of care provided from January through March in 2003,[3] 2004,[4] and 2005,[5] respectively.

Encounter data validation primarily entails comparing the health care reported in the medical record to the health care reported in the claims and encounter data. The medical record is generally considered the source document for services provided to enrollees because it is the document the provider uses in the continuing care of the patient. The CMS encounter data validation protocol contains the following steps:

1. assessment of the MCO/EPO's information system,
2. analysis of MCO/EPO electronic claims and encounter data for accuracy and completeness, and
3. review of medical records for confirmation of findings.

ICHP assesses the MCO/EPO's information system as part of the ongoing MCO/EPO Administrative Interviews. Findings from these interviews are reported to HHSC annually. ICHP also evaluates the electronic claims and encounter data for completeness and accuracy as they are submitted and prepares an annual data certification report for each of the programs included in the study. The protocol used for this evaluation is provided to HHSC. The focus of this report is the medical record review and the comparison between the contents of the medical record and the contents of the claims and encounter data.

Methods

Study Time Frame

Medical record documentation of care provided from January 2006 through March 2006 was compared to the services reported in the claims and encounter data for the same time period. Dates of service were used to identify the claims and encounter data for this study. A six-month lag from the end of the study period was used to ensure the majority of claims and encounters for the time period were included. Medical record reviews were conducted from February 2007 through May 2007.

In this report, comparisons are made to results from encounter data validation studies for fiscal years 2002, 2003, 2004, and 2005. The fiscal year 2002 study validated claims and encounter data from May 2002 through July 2002 against medical record documentation of care for that same period. The time period for the fiscal year 2002 study was selected because it was the first three-month period where ICHP did not have to rely on encounter data processed by the former External Quality Review

Organization (EQRO). The subsequent studies have validated claims and encounter data from January through March of each study year.

Although the time periods selected differ between the initial annual review and the three subsequent reviews, this is not expected to introduce any bias into the findings. There is no reason to expect medical record documentation and claims and encounter data content to vary based on months of the year. In fact, studies examining seasonal variation in certain diseases (i.e., asthma) find consistent documentation in the medical records.[6]

Definition of Terms

Table 1 contains key terms used in this report and their definitions.

Table 1. Definition of Terms

Term	Definition
Encounter	*In the claims and encounter data*: A unique date of service with coded diagnoses and procedures for a single provider *In the medical record*: Care/service provided on a unique date of service by the provider with diagnosis (provider assessment or impression) and procedures (care provided and/or diagnostic testing)
Review element	Specific element in the encounter data which is being compared to the medical record; elements included in this review are date of service, provider, diagnosis, and procedures
Fault rate	Ratio of missing and erroneous records to the total number of encounters as defined in CMS protocol and reported as a percent
Match rate	Ratio of correct records to the total number of encounters reported as a percent; in this report match rates are used
Under-reporting	Review element exists in the medical record but is not contained in the claims and encounter data; assumption is made that the provider failed to report the element
Over-reporting	Review element exists in the claims and encounter data but is not documented in the medical record; assumption is made that the provider reported an element not documented in the record

Sampling

The ICHP statistician calculated the sample size needed to determine an MCO/EPO's ability to achieve an 80 percent match rate between the contents of the medical record and the contents of the claims and encounter data using a 95 percent confidence interval. The 80 percent match rate was the same target match rate used in the second through fourth year encounter validation studies. It was selected as a reasonable target for the claims and encounter data validation because not all participating MCO/EPOs had achieved this rate in the prior year. Therefore, the 80 percent match rate was retained as the target for incremental improvement. CMS recommends a 70 percent match rate

for initial claims and encounter validation studies with an expectation of an incremental increase in subsequent years.

Due to the variation in match rates achieved in the prior fiscal year, the sample sizes for participating MCO/EPOs were different. The number of records requested to achieve the targeted sample was calculated based on the provider response rate for each MCO/EPO for the fiscal year 2005 claims and encounter data validation study. **Table 2** contains the targeted sample size of unique enrollee medical records and the number of records requested to achieve the target by MCO/EPO.

Table 2. Sample Sizes and Records Requested by Managed Care Organization

	Records Requested	Sample for Review
STAR	**4,568**	**2,408**
AMERIGROUP	560	308
Community First	473	266
Community Health Choice	647	343
El Paso First	531	266
FirstCare	575	308
Parkland Community	475	266
Superior	680	308
Texas Children's	627	343
STAR+PLUS	**1,156**	**651**
AMERIGROUP	576	308
Evercare	580	343
CHIP	**4,757**	**3,574**
AMERIGROUP	400	308
Community First	363	266
Cook Children's	284	216
Driscoll	334	266
El Paso First	385	266
FirstCare	403	308
Mercy	306	266
Parkland Community	345	266
Seton	367	266
Superior	435	308
Superior EPO	370	266
Texas Children's	349	266
UTMB	416	306
TOTAL ALL PROGRAMS	**10,481**	**6,633**

Sample Selection Criteria for STAR and STAR+PLUS. The following criteria were used to select medical records from the MCOs participating in the STAR and STAR+PLUS programs:

- the enrollee was enrolled in the MCO for two months or longer during the period of January 2006 through March 2006,
- the STAR+PLUS member was enrolled as Medicaid only,

- for members with encounters during the study time frame, the Medicaid identification number of the provider rendering care for the identified encounters in the encounter database matched to a Medicaid provider in the provider extract from the Texas Medicaid and Healthcare Partnership (TMHP), and
- for members without encounters during the study time frame, the Medicaid identification number of the Primary Care Provider (PCP) assigned to the enrollee in the enrollment files matched to a STAR or STAR+PLUS provider in the provider extract from TMHP.

Sample Selection Criteria for CHIP. The following criteria were used to select medical records from the MCO/EPOs participating in CHIP:

- the enrollee was enrolled in the MCO/EPO for two months or longer during the period of January 2006 through March 2006,
- the enrollee had one or more encounters in the encounter database during the period of January 2006 through March 2006, and
- the provider rendering care for the identified encounters in the encounter database matched to a CHIP provider in the provider extract from TMHP.

Different procedures were used to identify the PCPs for the STAR and STAR+PLUS MCOs compared to CHIP because CHIP enrollment files do not contain enrollee assignment to a PCP; this information is available only for STAR and STAR+PLUS beneficiaries. For all three programs, potential specialty providers were identified and excluded using provider type codes in the provider database, when possible, or procedure codes in the encounter data that relate to care provided by specialists.

Sample exclusion criteria. The following criteria were used to exclude submitted medical records from review:

- illegible handwriting,
- poor copy quality that could not be read accurately,
- record only documented care provided outside of the time period of the study, and
- record only documented care provided by a specialist or other service, such as durable medical equipment or podiatry.

Data Sources

Table 3 contains a summary of the data sources used for this study.

Table 3. Data Sources

Data Source	Obtained From	Data Used
Enrollment files	Texas Access Alliance - Medicaid and CHIP Enrollment Broker (834 and A010 file, respectively)	Enrollment status for January - March 2006 Enrollee name Enrollee date of birth Enrollee identification number PCP assigned (STAR/STAR+PLUS only)
Provider files	Provider file extract supplied by the Texas Medicaid and Healthcare Partnership	Provider name Provider address Provider telephone (when available) Provider type (when available)
Claims and encounter files	Participating MCO/EPOs (STAR/CHIP) HHSC (STAR+PLUS)	Enrollee name Date of service Billing provider Assigned MCO Diagnoses Procedures
Medical records	Participating PCPs	Enrollee name Date of service Provider name Diagnoses (provider impression/assessment) Procedures

Record Request and Submission Processes

The following steps were used to request the medical records from the PCPs:

1. **Verifying provider contact information**. For this record request process, ICHP limited provider contact information verification to those provider offices that had previously requested record requests be sent to an identified staff member for processing and submission. The identified staff member was contacted and asked to verify both the providers in the sample to be grouped in the request and the address to be used for the request. For all other providers, the requests were prepared for mailing to the address given for that provider in the provider file extract supplied by TMHP.
2. **Sending record request letters to providers**. Letters were sent to the providers requesting the medical records of the selected enrollees. Providers were asked to submit copies of documentation of care the enrollee received during the study period to ICHP's office in Gainesville, Florida. Pre-paid return mailers were supplied, and providers were reimbursed at the State's required rate for medical record copies. If the provider did not

submit a medical record copy as requested, he or she was asked to indicate one of the following reasons: a) the enrollee is not my patient, b) the enrollee is my patient but had no office visits during the study time period, or c) the enrollee is my patient, but the chart cannot be located.

When ICHP's Medical Record Evaluation Unit received the returned mailers, the providers' responses were logged into the review database using the following categories:

- *Chart Submitted*. A chart copy was received and filed for review.
- *Not a Patient*. The provider indicated the requested enrollee was not a patient in his or her practice.
- *Record Not Available*. The enrollee was a patient in the practice, but the chart could not be located or was not available for copying.
- *Patient Not Seen*. The enrollee was a patient in the practice, but the medical record did not contain any visits during the study time period.
- *Outside Timeframe*. A chart copy was received and filed, but all care documented was outside the study time period or other study parameters.
- *Bad Address*. Request returned by Postal Service for bad address and unable to locate correct address.
- *Duplicate*. A chart copy was received and filed but had been previously submitted by the same or another provider for review.

The record request, submission, logging, and abstraction procedures were designed to protect confidentiality in accordance with Federal and State regulations. To ensure confidentiality, the following steps were taken:

- Patient and provider-specific data were maintained in a password protected database created specifically for the study.
- Record requests were kept in locked files while preparation for mailing was completed.
- Requests were mailed directly to providers using first class postage. Providers were asked to submit record copies using pre-paid FedEx mailers, which could be tracked if not received timely by ICHP.
- All medical records received were logged into the password protected database, placed in file jackets with a health plan code and a provider code on the outside, and filed in locked filing cabinets.

- All personnel involved in record processing and review were trained in the treatment of patient identifiable data as required by the University of Florida Health Science Center Privacy Office.

To promote provider response to the record requests, the following steps were taken to remind providers to submit requested records:

- Four weeks after the initial request was mailed, a reminder postcard was sent to each provider who had not yet responded.
- Two weeks after the first reminder postcard, a second reminder postcard was sent.
- Two weeks after the second reminder postcard, a reminder phone call was made to providers for those MCOs where the targeted sample had not yet been achieved.
- As needed, ICHP contacted HHSC Health Plan Operations to request specific MCOs contact providers to submit records requested for the study.

Record Review Process

To reduce the possibility that records submitted earlier in the review process were more likely to be reviewed than those received later, the record review staff followed the following procedure:

- Records were logged in daily and filed in file drawers in numerical order by provider identification number.
- To ensure adequate records were available for random selection, the review was not started until two weeks after the first record was received, at which time five percent of requested medical records had been received, logged, and filed for review.
- Daily, each reviewer created a list of randomly generated provider codes to guide selection of records for review that day.
- When ongoing monitoring indicated the number of completed records began to approach the targeted sample size, the reviewers were provided a count of remaining records to review and were instructed to pull only the number needed to complete the sample size.

The following criteria were used to determine agreement or "match" between the medical record contents and the claims and encounter data contents:

- An encounter was matched on the date of service if the date of service in the medical record was the same as the date of service in the claims and encounter data.

- The provider was matched if the provider name in the medical record matched the provider in the claims and encounter data. In cases where the claims and encounter data contained a practice name, the medical record was matched if it contained documentation that the patient was seen in that practice.
- As directed in the CMS Encounter Data Validation Protocol, reviewers could not infer a diagnosis from the provider's documentation but were required to use the diagnosis listed by the provider as the impression or assessment following examination of the patient. For example, if the assessment recorded by the provider in the medical record was "cough with fever" and the diagnosis in the claims and encounter data was "upper respiratory infection," the record did not match for diagnosis even if provider documentation of the patient assessment would support the use of that diagnosis. Using this strict matching procedure, the findings in this report likely represent a worse case scenario for the diagnosis match between the medical records and the claims and encounter data.
- In cases where the provider listed multiple diagnoses, the reviewers were instructed to match the first listed diagnosis (as the primary diagnosis) with the primary diagnosis in the encounter data and then to match the primary diagnosis in the encounter data to any diagnosis in the medical record.
- Procedures in the claims and encounter data were matched to the medical record regardless of where they were documented in the encounter note.

The following codes were used to record the study findings:

0 = Element is present in the encounter data AND in the medical record (for diagnosis, the match is with the first diagnosis listed by the provider),

1 = Element is NOT present in the encounter data but is present in the medical record,

2 = Element is present in the encounter data but is NOT present in the medical record,

3 = Element is related to care outside this evaluation (by date or type of service),

4 = Documentation is inadequate to evaluate (illegible, poor copy), and

5 = Diagnosis (primary) in the encounter data is among ANY listed in the medical record.

The following steps were used to establish inter-rater reliability among the medical record reviewers:

- All reviewers initially reviewed and abstracted the same ten medical records. Any variation in review results among abstractors was discussed and the abstractors reached a consensus on the appropriate codes and/or definition of match on all reviewed elements.
- A random sample of records reviewed was selected for each reviewer. A minimum of twenty records for each week of the abstraction was subject to secondary and tertiary review by other abstractors acting as independent raters. Feedback was provided to reviewers about their performance in order to improve consistency in record review and abstraction.
- The rate of agreement among the reviewers was maintained between 92 percent and 98 percent for the course of the study.

Data Analysis

The unit of analysis for this study was the enrollee's health care encounter. The encounter was the unit of analysis because the goal was to assess the match, or agreement, between key elements of the encounter found in the medical record when compared to the health care claims and encounter data. The key elements were: date of service, provider, diagnosis, and procedure.

The first element addressed in analysis was the date of service match between the claims and encounter data and the documentation of care in the medical record. This match answers the question, "Is an encounter documented in the medical record when an encounter exists in the claims and encounter data?" The percent of encounters in the claims and encounter data that could be matched to an encounter on the same date of service in the medical record was calculated for each MCO and for each program. The next element addressed in the matching process was whether the provider listed in the claims and encounter data matched to the provider from whom the documentation of care was received, followed by the diagnosis, and then the procedures.

A match for date of service, provider, diagnosis, or procedure was counted independently for each element reviewed. The denominator for the match rates is the number of encounters reviewed. The numerator is the number of encounters reviewed where a match was determined for that element. For example, if 100 encounters were reviewed and the diagnosis was matched between the medical

record and the claims and encounter data for 70 of those encounters, the match rate for diagnosis would be 70 percent.

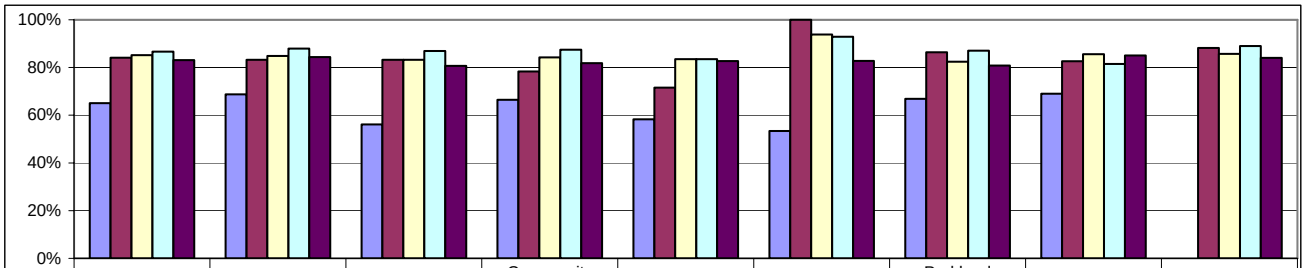
Results

Provider Response Rate

The provider response rate is the percent of providers receiving a request for medical records who responded to the request. Any of the responses previously defined for any records requested from the provider (if more than one) were considered a valid response for calculating this rate.

Requests were mailed to 2,331 STAR providers statewide to submit medical records for the encounter validation study. Of the STAR providers to whom a request was mailed, 83 percent responded to the request by providing records for review and/or indicating the status of records not provided. This is slightly lower than the 87 percent provider response rate for fiscal year 2005. All MCO-level response rates were greater than 80 percent. Five MCOs had response rates drop by five percentage points or more (Community First, Community Health Choice, FirstCare, Parkland Community, and Texas Children's). **Figure 1** displays the five year comparison of the provider response rates by STAR MCO.

Figure 1. Percent of STAR Providers Responding to Record Request, Fiscal Year Comparison



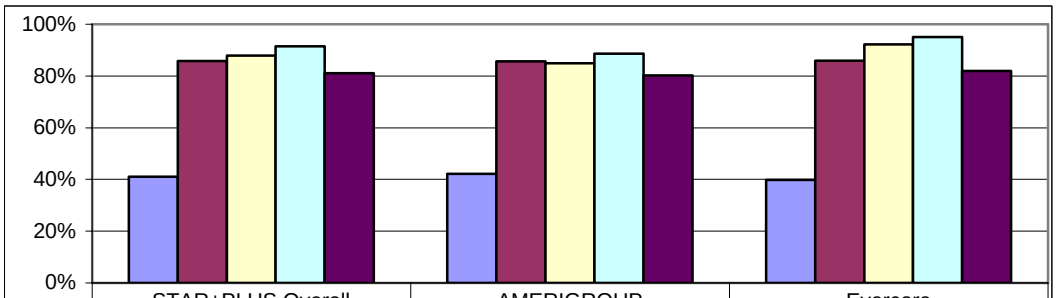
	STAR Overall	AMERIGROUP	Community First	Community Health Choice	El Paso First	FirstCare	Parkland Community	Superior	Texas Children's
2002	65.1%	68.8%	56.1%	66.5%	58.3%	53.4%	66.9%	69.0%	-
2003	84.1%	83.2%	83.2%	78.3%	71.6%	100.0%	86.4%	82.6%	88.2%
2004	85.2%	84.8%	83.2%	84.2%	83.5%	93.8%	82.4%	85.6%	85.7%
2005	86.6%	87.9%	86.9%	87.5%	83.6%	92.9%	87.1%	81.5%	89.0%
2006	83.1%	84.4%	80.7%	81.8%	82.7%	82.8%	80.8%	85.0%	84.0%

Notes: 1. Two MCOs exiting STAR had prior year findings included in STAR Overall results, but are not reported individually: HMO Blue exited STAR following 2002 and JPS MetroWest exited following 2003.
2. Texas Children's entered as a STAR MCO in fiscal year 2003.

Requests were mailed to 561 STAR+PLUS providers to submit medical records for the encounter validation study. Of the STAR+PLUS providers to whom a request was mailed, 81 percent responded to the request by providing records for review and/or indicating status of records not provided. This is substantially lower than the 91 percent provider response rate for fiscal year 2005.

Both MCOs had lower response rates when compared to fiscal year 2005. **Figure 2** displays the five year comparison of the provider response rates by STAR+PLUS MCO.

Figure 2. Percent of STAR+PLUS Providers Responding to Record Request, Fiscal Year Comparison

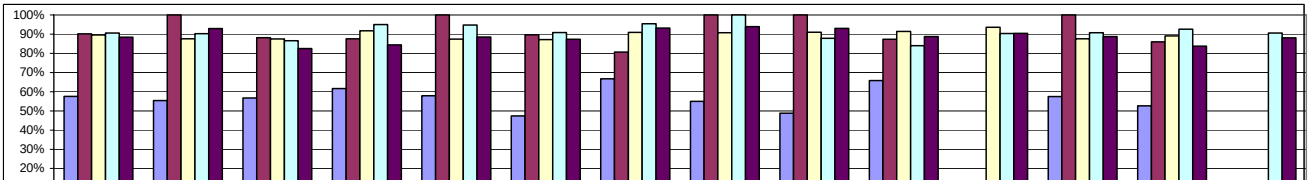


	STAR+PLUS Overall	AMERIGROUP	Evercare
2002	41.0%	42.2%	39.8%
2003	85.8%	85.7%	85.9%
2004	87.9%	84.9%	92.2%
2005	91.4%	88.6%	95.0%
2006	81.1%	80.2%	82.0%

Note: Evercare succeeded HMO Blue in management of the designated STAR+PLUS MCO population in fiscal year 2003.

Requests were mailed to 2,093 CHIP providers to submit medical records for the encounter validation study. Of the CHIP providers to whom a request was mailed, 88 percent responded to the request by providing records for review and/or indicating status of records not provided. This compares to a 91 percent provider response rate for fiscal year 2005. Eight CHIP MCOs and the EPO had response rates lower than the prior year with four of those dropping more than five percentage points (Cook Children's, Driscoll Children's, Mercy, and UTMB). **Figure 3** displays the five year comparison of provider response by the CHIP MCO/EPOs.

Figure 3. Percent of CHIP Providers Responding to Record Request, Fiscal Year Comparison



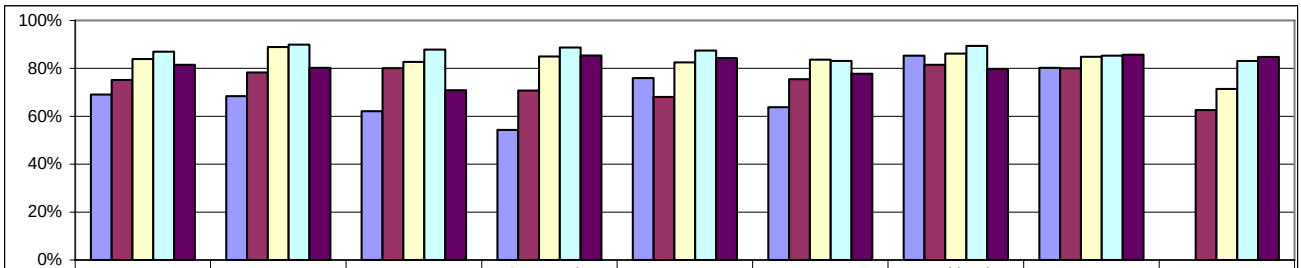
	CHIP Overall	AMERIGROUP	Community First	Cook Children's	Driscoll Children's	El Paso First	FirstCare	Mercy	Parkland Community	Seton	Superior	Texas Children's	UTMB	Superior EPO
2002	57.6%	55.4%	56.7%	61.7%	57.9%	47.5%	66.7%	55.0%	48.8%	65.9%	-	57.6%	52.6%	-
2003	90.1%	100.0%	88.2%	87.6%	100.0%	89.6%	80.6%	100.0%	100.0%	87.3%	-	100.0%	86.0%	-
2004	89.6%	87.6%	87.5%	91.8%	87.4%	87.2%	90.9%	90.7%	91.0%	91.3%	93.6%	87.6%	89.1%	-
2005	90.6%	90.2%	86.6%	94.9%	94.7%	90.8%	95.5%	100.0%	87.8%	84.1%	90.3%	90.7%	92.5%	90.6%
2006	88.4%	92.9%	82.5%	84.4%	88.5%	87.3%	93.1%	93.9%	93.0%	88.8%	90.4%	88.8%	83.7%	88.1%

Notes: 1. The first CHIP EPO (Clarendon) exited in fiscal year 2004 and was replaced by Superior EPO. Clarendon's findings are not reported individually, but are included in the CHIP Overall results for fiscal years 2002 thourgh 2004.
2. Superior entered as a CHIP MCO in fiscal year 2004.

Match Rate for Date of Service

Of 11,137 STAR encounters reviewed, 82 percent matched between the date of service reported in the encounter data and the medical record compared to 87 percent in the prior year study. Two STAR MCOs increased slightly while the remaining STAR MCOs had lower date of service match rates than in the previous year. Two MCOs (Community First and FirstCare) dropped below the target of 80 percent with Community First dropping about 17 percentage points. **Figure 4** displays a five year comparison of date of service match rates for the STAR MCOs.

Figure 4. STAR Date of Service Match Rates, Fiscal Year Comparison

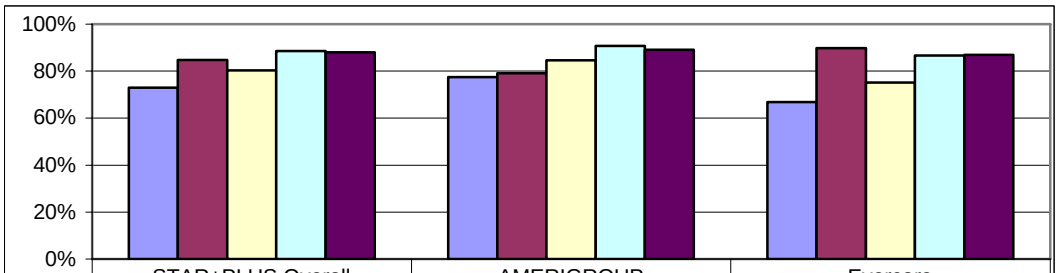


	STAR Overall	AMERIGROUP	Community First	Community Health Choice	El Paso First	FirstCare	Parkland Community	Superior	Texas Children's
2002	69.0%	68.4%	62.1%	54.3%	75.9%	63.8%	85.3%	80.2%	-
2003	75.2%	78.3%	80.1%	70.8%	68.1%	75.5%	81.5%	80.0%	62.6%
2004	83.9%	88.9%	82.7%	85.0%	82.5%	83.7%	86.1%	84.8%	71.4%
2005	87.0%	89.9%	87.9%	88.7%	87.5%	83.2%	89.4%	85.3%	83.1%
2006	81.5%	80.2%	70.8%	85.4%	84.3%	77.7%	79.7%	85.7%	84.7%

Notes: 1. Two MCOs exiting STAR had prior year findings included in STAR Overall results, but are not reported individually: HMO Blue exited STAR following 2002 and JPS Metrowest exited following 2003.
2. Texas Children's entered as a STAR MCO in fiscal year 2003.

Of the 1,892 STAR+PLUS encounters reviewed, 88 percent matched between the date of service reported in the encounter data and the medical record compared to 89 percent in the prior year study. Both STAR+PLUS MCOs scored above 85 percent and were within two percentage points of their fiscal year 2005 match rates. **Figure 5** displays a five year comparison of date of service match rates for the two STAR+PLUS MCOs.

Figure 5. STAR+PLUS Date of Service Match Rates, Fiscal Year Comparison

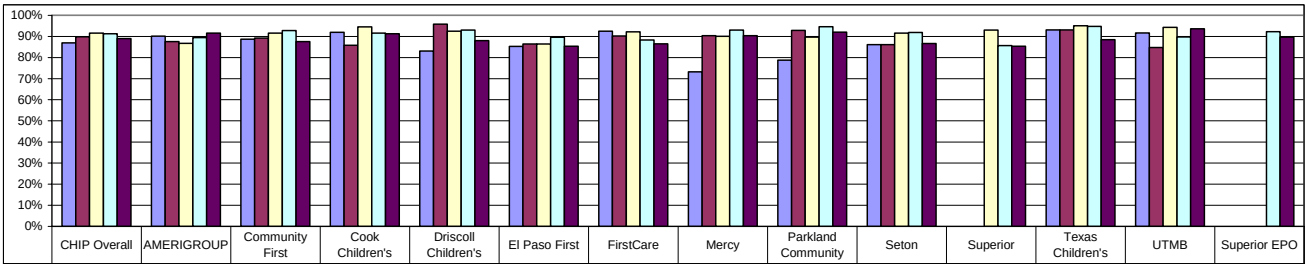


	STAR+PLUS Overall	AMERIGROUP	Evercare
2002	73.0%	77.5%	66.9%
2003	84.8%	79.1%	89.8%
2004	80.3%	84.6%	75.1%
2005	88.6%	90.8%	86.6%
2006	88.0%	89.2%	86.9%

Note: Evercare succeeded HMO Blue in management of the designated STAR+PLUS MCO population in fiscal year 2003.

Of the 9,231 CHIP encounters reviewed, 89 percent matched between the date of service reported in the encounter data and the medical record compared to 91 percent in the prior year's study. All CHIP MCOs and the EPO continued with a date of service match rate of 85 percent or above as they did in each of the prior three fiscal years, even though some dropped their match rate this year. **Figure 6** displays the five year comparison of the date of service match rates for the CHIP MCOs and EPO.

Figure 6. CHIP Date of Service Match Rates, Fiscal Year Comparison



	CHIP Overall	AMERIGROUP	Community First	Cook Children's	Driscoll Children's	El Paso First	FirstCare	Mercy	Parkland Community	Seton	Superior	Texas Children's	UTMB	Superior EPO
2002	87.0%	90.1%	88.7%	92.0%	83.1%	85.3%	92.5%	73.2%	78.8%	86.1%	-	93.1%	91.6%	-
2003	89.9%	87.6%	89.3%	85.8%	95.9%	86.4%	90.2%	90.4%	92.9%	86.1%	-	93.1%	84.8%	-
2004	91.6%	86.7%	91.6%	94.5%	92.5%	86.4%	92.2%	90.1%	89.7%	91.5%	93.0%	95.1%	94.3%	-
2005	91.3%	89.4%	92.8%	91.6%	93.0%	89.6%	88.3%	93.1%	94.6%	91.9%	85.6%	94.8%	89.8%	92.2%
2006	89.0%	91.6%	87.6%	91.3%	88.0%	85.4%	86.6%	90.4%	92.1%	86.6%	85.4%	88.5%	93.7%	89.7%

Notes: 1. The first CHIP EPO (Clarendon) exited in fiscal year 2004 and was replaced by Superior EPO. Clarendon's findings are not reported individually, but are included in the CHIP Overall results for fiscal years 2002 thourgh 2004.
2. Superior entered as a CHIP MCO in fiscal year 2004.

Match Rates for Provider, Diagnosis, and Procedure

Results of matching the provider, diagnosis, and procedures found in the claims and encounter data to those found in the medical records are provided in **Appendix A** for the MCOs and EPO

participating in STAR, STAR+PLUS, and CHIP. From fiscal year 2002 to fiscal year 2003, the STAR Program overall improved from 82 percent to 100 percent in matching to provider. This gain held in fiscal years 2004, 2005, and 2006. While there was a slight decrease for three MCOs in fiscal year 2006, all matched at 97 percent or above for provider match. For the diagnosis match, STAR overall decreased from 81 percent to 77 percent with only two of eight MCOs, Superior and Texas Children's, improving. Four MCOs, AMERIGROUP, Community First, FirstCare, and Parkland Community, dropped their diagnosis match rates more than five percentage points. For the procedure match, STAR overall dropped from 87 percent to 82 percent with two MCOs improving slightly (Superior and Texas Children's). Two MCOs dropped their procedure match rate more than 10 percentage points, AMERIGROUP and Community Health Choice. Another two dropped by more than five percentage points, FirstCare and Parkland Community.

Within the STAR diagnosis match rate, the subset identified as under-reporting (diagnosis is in the medical record but not in the encounter data) was 13 percent of all encounters reviewed, remaining the same as in fiscal year 2005. Community First had the lowest rate at seven percent and FirstCare had the highest at 19 percent.

The subset identified as over-reporting (diagnosis is in the encounter data but not in the medical record) was 10 percent of all encounters reviewed, up from six percent in fiscal year 2005. Community First demonstrated the highest rate of over-reporting at 24 percent and Texas Children's had the lowest at three percent. **Table 4** provides the STAR MCO specific rates comparing the current and previous studies.

Table 4. Detail on STAR Diagnosis Non-Match for Under- and Over-Reporting, Fiscal Year Comparison

Plan	Over-Reporting Percent					Under-Reporting Percent				
	In Data Not In Chart					In Chart Not In Data				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
STAR Overall	**10.3**	**14.9**	**6.0**	**5.6**	**10.2**	**20.1**	**22.4**	**14.2**	**13.4**	**12.8**
AMERIGROUP	4.2	12.1	5.5	4.6	14.4	23.3	29.9	9.2	12.6	12.7
Community First	19.8	14.0	6.7	3.1	23.9	15.3	26.3	12.8	13.3	7.2
Community Health Choice	11.6	16.2	8.1	3.5	6.3	34.2	24.7	14.4	22.0	13.5
El Paso First	4.8	26.1	3.8	4.3	7.2	20.2	13.8	14.9	11.2	10.8
FirstCare	10.8	10.4	5.9	8.6	9.6	21.0	18.6	14.7	11.0	19.1
Parkland Community	9.6	11.5	6.3	4.8	12.9	13.6	31.8	11.7	12.4	13.4
Superior	9.0	17.3	5.9	10.5	6.1	7.9	14.2	14.0	8.7	10.6
Texas Children's	- -	7.5	6.1	4.8	3.1	- -	44.2	30.7	17.9	17.6

Notes: 1. HMO Blue exited as a STAR MCO prior to the SFY 2003 study.
2. Texas Children's Health Plan was not a STAR MCO during the SFY 2002 study.
3. JPS MetroWest exited as a STAR MCO prior to the SFY 2004 study.
4. Over- or under-reporting rates increasing in SFY 2006 are shaded.

From fiscal year 2002 to fiscal year 2003, STAR+PLUS overall improved from 90 percent to 100 percent in matching to provider. This improvement was maintained in fiscal years 2004 through 2006. STAR+PLUS maintained improvement in diagnosis match achieved in fiscal year 2006 at 79 percent. AMERIGROUP had a diagnosis match rate of 82 percent for the second year in a row. Evercare dropped about one percentage point from its fiscal year 2005 match rate, achieving 76 percent. Overall, STAR+PLUS MCOs improved to 88 percent from 87 percent in matching to procedure. For procedure match, both MCOs exceeded 85 percent.

Within the STAR+PLUS diagnosis match rate, the subset identified as under-reporting (diagnosis is in the medical record but not in the encounter data) was 13 percent for AMERIGROUP and 20 percent for Evercare with an overall rate of 17 percent. The overall rate for STAR+PLUS under-reporting in fiscal year 2005 was 13 percent. The subset identified as over-reporting (diagnosis is in the encounter data but not in the medical record) was five percent for both AMERIGROUP and Evercare. The overall rate for STAR+PLUS over-reporting in fiscal year 2005 was eight percent. **Table 5** provides the specific rates for the STAR+PLUS MCOs comparing the current and previous studies.

Table 5. Detail on STAR+PLUS Diagnosis Non-Match for Under- and Over-Reporting, Fiscal Year Comparison

Plan	Over-Reporting Percent In Data Not In Chart					Under-Reporting Percent In Chart Not In Data				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
STAR+PLUS Overall	**32.9**	**28.9**	**7.1**	**8.1**	**5.0**	**21.2**	**16.4**	**22.8**	**12.5**	**16.6**
AMERIGROUP	31.3	19.4	6.6	7.7	5.3	23.6	19.0	20.1	10.4	13.0
Evercare	35.0	42.4	7.6	8.5	4.7	18.2	12.7	26.0	14.5	19.7

Notes: 1. Evercare succeeded HMO Blue in management of the designated STAR+PLUS MCO population in SFY 2003.

2. Over- or under-reporting rates increasing in SFY 2006 are shaded.

In fiscal year 2006, the CHIP overall rate for matching to provider remained at 100 percent for the fifth year in a row. All MCOs and the EPO achieved a 100 percent match for provider, except for Mercy at 99 percent. For diagnosis match, CHIP overall decreased from 84 percent in fiscal year 2005 to 82 percent in fiscal year 2006 with two MCOs improving. Three MCOs, Community First, Parkland Community, and Seton, decreased their diagnosis match rates by over five percentage points. For the procedure match, CHIP overall dropped to 89 percent from 91 percent in fiscal year 2005 with two MCOs improving (AMERIGROUP and UTMB). All CHIP MCOs and the EPO achieved an 85 percent or better match rate on procedures.

Within the CHIP diagnosis match rate, the subset identified as under-reporting (diagnosis is in the medical record but not in the encounter data) ranged from 10 percent (Mercy and FirstCare) to 19 percent (Seton) at the MCO/EPO level with an overall rate of 13 percent. The overall rate for CHIP MCO/EPO under-reporting in fiscal year 2005 was 10 percent. The subset identified as over-reporting (diagnosis is in the encounter data but not in the medical record) ranged from three percent (El Paso First and UTMB) to nine percent (FirstCare) at the MCO level with an overall rate of five percent. The overall rate for CHIP MCO/EPO over-reporting in fiscal year 2005 was six percent. **Table 6** provides the CHIP MCO/EPO specific rates comparing the current and previous studies.

Table 6. Detail on CHIP Diagnosis Non-Match for Under- and Over- Reporting, Fiscal Year Comparison

Plan	Over-Reporting Percent In Data Not In Chart					Under-Reporting Percent In Chart Not In Data				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
CHIP Overall	**21.5**	**7.80**	**5.1**	**5.8**	**5.4**	**4.2**	**16.2**	**10.6**	**10.3**	**13.1**
AMERIGROUP	17.4	10.3	9.7	8.2	6.5	5.6	16.3	11.8	9.4	11.8
Community First	16.0	8.5	4.3	6.5	5.4	8.4	15.3	9.9	8.6	17.2
Cook Children's	8.9	11.0	4.6	5.7	4.3	4.0	13.5	6.0	6.5	11.3
Driscoll	34.0	1.6	3.8	4.4	6.8	2.8	20.6	11.8	10.1	12.1
El Paso First	20.1	8.1	5.0	4.2	3.1	3.3	18.8	14.5	10.3	14.4
FirstCare	13.0	9.0	4.7	8.9	8.7	3.5	11.7	8.0	9.9	10.1
Mercy	39.2	8.6	7.1	4.8	6.6	2.7	17.6	10.7	10.2	9.8
Parkland Community	30.6	5.2	6.8	3.3	5.3	1.4	19.3	10.0	9.4	16.5
Seton	23.0	5.5	5.3	4.3	3.8	4.4	16.1	13.5	11.8	18.9
Superior	- -	- -	3.0	10.6	5.5	-	-	11.3	9.2	12.3
Texas Children's	11.7	5.6	4.2	2.5	4.8	4.5	16.5	9.0	11.7	11.7
UTMB	24.1	10.6	2.4	8.4	3.2	4.2	14.1	12.6	13.9	12.2
Superior EPO	- -	- -	- -	4.2	5.9	- -	- -	- -	12.1	12.1

Notes: 1. Superior entered as a CHIP MCO in September 2003.
2. Clarendon exited and Superior entered as the CHIP EPO during the fiscal year 2004 study.
3. Over- or under-reporting rates increasing in SFY 2006 are shaded.

Provider Satisfaction with the Request and Submission Process

Fifty-two percent of providers supplying records for review completed and returned an evaluation tool assessing satisfaction with the record request and submission process. This response rate is down from 57 percent in the fiscal year 2005 study. Possible ratings were from 1 (Strongly Disagree) to 5 (Strongly Agree) for five statements. Overall, 87 to 88 percent of respondents agreed or strongly agreed with each statement.

The percent responding by rating to each statement is provided in **Table 7**.

Table 7. Provider Satisfaction Results, Fiscal Year 2006

Provider Satisfaction Statements	1 Strongly Disagree (percent)	2 Disagree (percent)	3 Neutral (percent)	4 Agree (percent)	5 Strongly Agree (percent)
Instructions were clear and understandable.	8.1	0.9	3.4	43.0	44.7
Enough time was allowed for copying and submitting records.	8.7	1.1	3.6	40.0	46.6
The invoice for reimbursement was clear and understandable.	8.0	0.8	3.3	42.1	45.8
The return mailing process was acceptable.	8.2	0.7	3.3	42.4	45.5

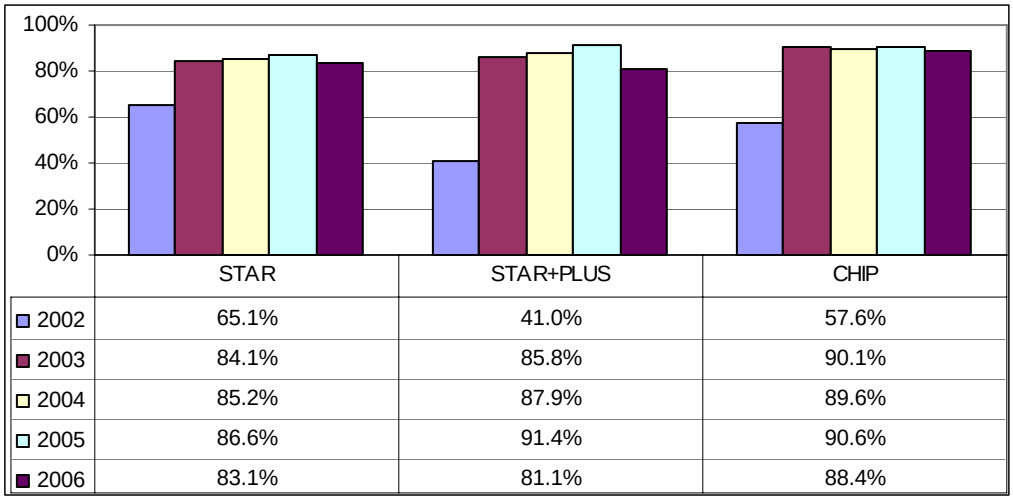
Conclusions and Recommendations

Provider Response Rate

While the provider response rate dropped for all programs, as displayed in **Figure 7**, all programs did remain above an 80 percent response rate. In prior years, processes used to prepare the requests to providers included specific efforts to validate provider addresses prior to mailing. That was not done for this study and may have contributed to the lower response rates. Other processes remained the same, including allowing at least six weeks for provider response and using postcard reminders at two points to request submission of records not yet received.

The database did allow for tracking of mailed requests returned because of incorrect addresses. ICHP will continue to collect this data, which is available to HHSC as needed, to address the quality of provider information.

Figure 7. Program Comparison of Provider Response to Record Requests by Fiscal Year



	STAR	STAR+PLUS	CHIP
2002	65.1%	41.0%	57.6%
2003	84.1%	85.8%	90.1%
2004	85.2%	87.9%	89.6%
2005	86.6%	91.4%	90.6%
2006	83.1%	81.1%	88.4%

The percent of providers statewide receiving a request across all programs who did not respond increased to 15 percent in fiscal year 2006, up from 12 percent in the prior three years. In this encounter data validation study, ICHP worked directly with providers to improve response rates. In addition, HHSC was contacted at the end of the scheduled review period and requested the participation of two MCOs to achieve their targeted sample. The Medicaid and CHIP MCO/EPOs require provider participation in quality activities, including making records available for review. ICHP has considered providing the MCOs with the names of non-responding providers for follow-up after the study but is concerned this effort would not be effective given the concern over incorrect addresses.

Summary Statements:

- Provider response to record requests exceeded 80 percent for each program in the fiscal year 2006 study.
- Individually, each participating MCO/EPO across all three programs exceeded an 80 percent response rate.

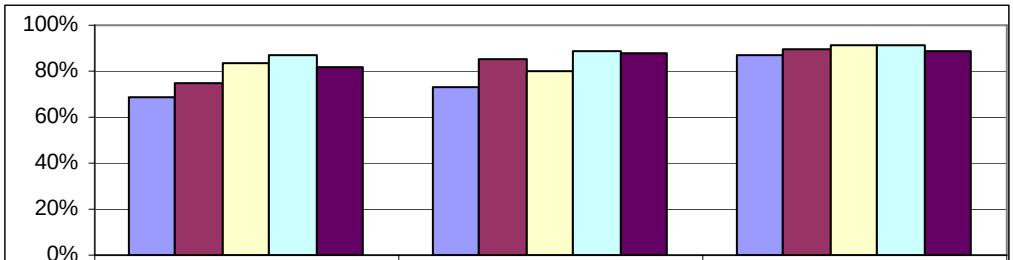
ICHP Recommendations to HHSC:

- Provide participating MCOs with the results of this study.
- Continue to support ICHP in working directly with participating MCOs in future studies to obtain records from providers not responding.

Match Rate for Date of Service

While there was variation among MCOs and the CHIP EPO, all three programs reviewed exceeded the 80 percent incremental improvement target for date of service match rate, as seen in **Figure 8**. All programs did match at a lower rate than in the previous year with STAR experiencing the greatest drop. ICHP will continue to monitor performance in future encounter data validation studies.

Figure 8. Program Comparison, Date of Service Match Rate by Fiscal Year

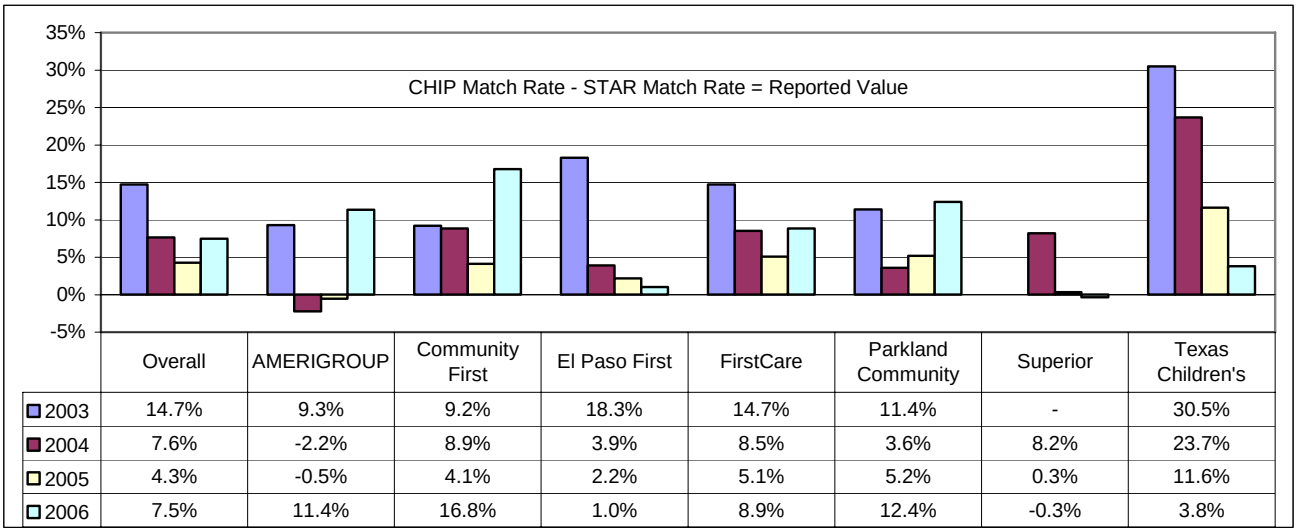


	STAR	STAR+PLUS	CHIP
2002	69.0%	73.0%	87.0%
2003	75.2%	84.8%	89.9%
2004	83.9%	80.3%	91.6%
2005	87.0%	88.6%	91.3%
2006	81.5%	88.0%	89.0%

At the MCO level, two STAR health plans dropped their date of service match rate by 10 percentage points with another health plan dropping by nearly 17 points. Both STAR+PLUS plans continued to demonstrate match rates over 85 percent, as did all of the CHIP MCOs and the CHIP EPO.

With the exception of Superior, all MCOs participating in both STAR and CHIP demonstrated a higher date of service match rate for their CHIP product. **Figure 9** displays the STAR and CHIP match rate difference by MCO for four fiscal years.

Figure 9. Date of Service Match Rate Difference for MCOs Participating in STAR and CHIP, Fiscal Year Comparison



	Overall	AMERIGROUP	Community First	El Paso First	FirstCare	Parkland Community	Superior	Texas Children's
2003	14.7%	9.3%	9.2%	18.3%	14.7%	11.4%	-	30.5%
2004	7.6%	-2.2%	8.9%	3.9%	8.5%	3.6%	8.2%	23.7%
2005	4.3%	-0.5%	4.1%	2.2%	5.1%	5.2%	0.3%	11.6%
2006	7.5%	11.4%	16.8%	1.0%	8.9%	12.4%	-0.3%	3.8%

Note: Superior entered as a CHIP MCO in fiscal year 2004.

Summary Statements:

- The match rate between the date of service reported in the claims and encounter data and the medical record was over 85 percent for STAR+PLUS and CHIP in fiscal year 2006.
- The STAR date of service match rate dropped to 82 percent in fiscal year 2006 from 87 percent in fiscal year 2005.
- With one exception, the MCOs participating in both STAR and CHIP continue to demonstrate a higher date of service match for their CHIP product when compared to STAR.

ICHP Recommendation to HHSC:

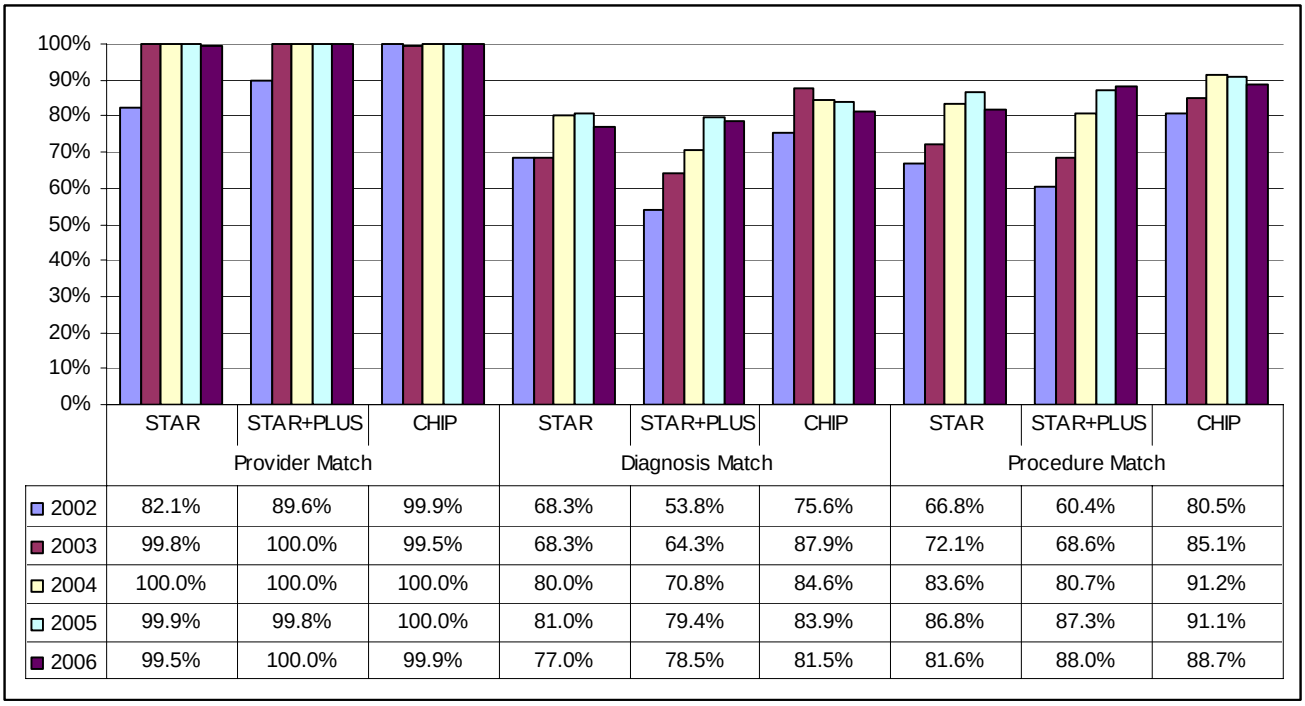
- Provide participating MCOs with the results of this study.

Match Rates for Provider, Diagnosis, and Procedure

More specific matching of providers, diagnoses, and procedures yielded mixed results by program as displayed in **Figure 10**. The provider match rates remained at 100 percent for all programs. All three programs dropped their diagnosis match rates with only CHIP achieving the 80

percent incremental improvement target. STAR+PLUS demonstrated improvement in the procedure match rate. STAR and CHIP both dropped their procedure match rates, but all programs remain above the 80 percent incremental improvement target.

Figure 10. Provider, Diagnosis, and Procedure Match Rates for STAR, STAR+PLUS, and CHIP, Fiscal Year Comparison



	Provider Match			Diagnosis Match			Procedure Match		
	STAR	STAR+PLUS	CHIP	STAR	STAR+PLUS	CHIP	STAR	STAR+PLUS	CHIP
2002	82.1%	89.6%	99.9%	68.3%	53.8%	75.6%	66.8%	60.4%	80.5%
2003	99.8%	100.0%	99.5%	68.3%	64.3%	87.9%	72.1%	68.6%	85.1%
2004	100.0%	100.0%	100.0%	80.0%	70.8%	84.6%	83.6%	80.7%	91.2%
2005	99.9%	99.8%	100.0%	81.0%	79.4%	83.9%	86.8%	87.3%	91.1%
2006	99.5%	100.0%	99.9%	77.0%	78.5%	81.5%	81.6%	88.0%	88.7%

STAR+PLUS and CHIP increased their rates of under-reporting (diagnosis documented by the provider in the medical record was not found in the encounter data) with STAR remaining essentially unchanged. The range for under-reporting at the program level was 13 percent to 17 percent. STAR+PLUS and CHIP decreased their rates of over-reporting (primary diagnosis in the encounter data not documented by the provider in the medical record) of diagnosis with STAR increasing this rate after two years of demonstrated improvement. The range for over-reporting at the program level was five percent to 10 percent.

Summary Statements:

- Provider match rates for all programs remained at 100 percent in fiscal year 2006. This is not surprising with the current study design, where records are requested from a specific provider.
- The diagnosis match rate for all programs decreased from the prior fiscal year with only CHIP remaining above the 80 percent incremental improvement target.

- The procedure match rate improved for STAR+PLUS with STAR and CHIP dropping, but all programs remaining above 80 percent.
- None of the programs demonstrated improvement in under-reporting rates; STAR+PLUS and CHIP increased while STAR remained unchanged.
- Over-reporting rates improved (decreased) for STAR+PLUS and CHIP, but the rate for STAR increased.

ICHP Recommendations to HHSC:

- Provide participating MCOs with the results of this study.
- Discontinue provider matching when using the current study methodology in the future.
- Continue the incremental improvement target of 80 percent until all programs demonstrate this level for all four match elements.

Provider Satisfaction with the Request and Submission Process

Provider positive response to the evaluation statements ranged from 87 to 88 percent with the least positive responses relating to inadequate payment for records copied and submitted. The response rate was 52 percent, a decrease from 57 percent in the prior year.

Summary Statements:

- Provider satisfaction with the record review and submission process remained steady with positive responses ranging from 87 to 88 percent for each rating statement.
- The provider satisfaction survey response rate decreased from 57 percent to 52 percent.

ICHP Recommendations to HHSC:

- Provide participating MCOs with the results of this study.
- Continue to assess provider satisfaction and to solicit suggestions for improvement from providers.

Overall Conclusion

While there was variation among MCOs, all programs assessed achieved or exceeded the 80 percent incremental improvement target established for date of service match in this study for the third consecutive year of measurement. Incremental improvement is the goal stated in the CMS protocol. The results of the fiscal year 2006 study support the conclusion that, for most MCOs, the quality of the

data is acceptable for use in measuring quality of care indicators using administrative data and in analysis for reimbursement purposes.

CHIP remained over the 80 percent incremental improvement target for diagnosis match. STAR decreased to 77 percent, falling below the incremental improvement target for the first time in a three year period. STAR+PLUS has yet to achieve the improvement target, remaining at 79 percent for the second consecutive year. As previously noted, the ICHP medical record reviewers adhered to strict criteria to determine a match between the medical record and the claims and encounter data. Thus, the findings presented in this report represent a "worse case" performance.

Appendix A: Provider, Diagnosis, and Procedure Match Rates, Fiscal Year Comparison

STAR	Provider Match - Percent					Diagnosis Match - Percent					Procedure Match - Percent				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
STAR Overall	**82.1**	**99.8**	**100.0**	**99.9**	**99.5**	**68.3**	**68.3**	**80.0**	**81.0**	**77.0**	**66.8**	**72.1**	**83.6**	**86.8**	**81.6**
AMERIGROUP	96.3	100.0	100.0	100.0	97.4	76.0	64.2	85.6	82.8	72.9	68.7	75.6	88.5	90.0	79.7
Community Health Choice	73.2	99.8	99.9	99.7	99.9	52.6	62.1	77.7	83.6	80.2	55.3	66.1	83.0	87.2	72.0
Community First	78.1	99.8	100.0	99.9	99.1	58.0	65.5	80.6	74.5	68.9	58.3	77.1	83.0	88.4	85.6
El Paso First	82.8	99.5	100.0	99.9	100.0	80.3	67.1	81.3	84.5	82.2	73.8	66.8	83.5	87.1	84.0
FirstCare	76.4	100.0	99.9	99.9	100.0	66.5	77.4	79.8	80.4	71.3	64.7	72.8	83.4	83.4	77.9
Parkland Community	85.7	100.0	100.0	100.0	99.8	75.9	66.5	82.3	82.8	73.7	79.4	75.8	86.1	89.0	79.9
Superior	89.5	99.6	100.0	99.8	99.8	80.4	75.3	80.5	80.8	83.3	79.1	77.9	83.8	84.9	85.7
Texas Children's	- -	100.0	99.9	100.0	100.0	- -	53.1	63.3	77.3	79.2	- -	58.8	71.4	83.4	84.5

Notes: 1. HMO Blue exited STAR in fiscal year 2003 and JPS MetroWest exited in fiscal year 2004; their individual results are not reported, but their findings contribute to the overall STAR rates for the reporting period.

2. Texas Children's Health Plan was not a STAR MCO during the SFY 2002 study.

3. Match rates decreasing in SFY 2006 are shaded.

STAR+PLUS	Provider Match - Percent					Diagnosis Match - Percent					Procedure Match - Percent				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
STAR+PLUS Overall	**89.6**	**100.0**	**100.0**	**99.8**	**100.0**	**53.8**	**64.3**	**70.8**	**79.4**	**78.5**	**60.4**	**68.6**	**80.7**	**87.3**	**88.0**
AMERIGROUP	90.4	100.0	99.9	99.6	100.0	52.8	73.6	73.9	81.9	81.7	73.0	78.4	84.9	90.6	89.0
Evercare	88.8	100.0	100.0	100.0	99.9	55.0	51.1	67.2	77.0	75.6	48.9	53.7	75.6	84.2	87.1

Notes: 1. Evercare succeeded HMO Blue in management of the designated STAR+PLUS MCO population in SFY 2003.

2. Match rates decreasing in SFY 2006 are shaded.

Appendix A: Provider, Diagnosis, and Procedure Match Rates, Fiscal Year Comparison (Continued)

CHIP	Provider Match - Percent					Diagnosis Match - Percent					Procedure Match - Percent				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
CHIP Overall	**99.9**	**99.5**	**100.0**	**100.0**	**99.9**	**75.6**	**87.9**	**84.6**	**83.9**	**81.5**	**80.5**	**85.1**	**91.2**	**91.1**	**88.7**
AMERIGROUP	100.0	100.0	99.7	100.0	99.8	78.2	80.1	79.0	82.4	81.7	82.4	82.6	86.3	89.8	91.4
Community First	99.9	99.7	100.0	100.0	100.0	77.3	86.7	86.4	84.9	77.5	79.3	85.0	92.1	91.3	87.5
Cook Children's	100.0	99.8	100.0	100.0	100.0	88.1	88.1	89.3	87.8	84.4	87.0	81.7	94.3	92.1	91.5
Driscoll Children's	99.9	100.0	100.0	100.0	100.0	65.9	92.9	84.8	85.5	81.3	78.3	93.8	92.0	91.8	86.2
El Paso First	100.0	100.0	100.0	100.0	100.0	78.5	81.0	81.1	85.5	82.5	76.2	81.0	86.0	89.0	85.8
FirstCare	100.0	100.0	100.0	100.0	100.0	84.5	90.5	87.4	81.2	81.1	85.1	83.7	90.5	88.3	86.4
Mercy	100.0	99.8	100.0	100.0	99.4	53.7	84.0	82.2	85.0	83.6	71.2	85.5	90.3	93.2	90.6
Parkland Community	100.0	99.1	100.0	100.0	100.0	70.5	93.2	83.6	87.4	78.2	70.3	87.4	89.1	94.8	91.5
Seton	99.5	98.4	100.0	100.0	99.7	74.2	94.3	81.5	83.9	77.3	82.7	89.1	90.7	92.0	85.3
Superior	- -	- -	99.8	100.0	100.0	- -	- -	85.9	80.1	82.2	- -	- -	93.7	86.3	84.7
Texas Children's	100.0	99.0	100.0	100.0	100.0	86.1	86.2	87.0	85.7	83.5	84.8	87.0	93.8	94.2	89.0
UTMB	100.0	99.7	94.0	100.0	100.0	73.7	85.5	86.1	77.8	85.8	86.8	77.2	95.2	89.4	94.0
Superior EPO	- -	- -	- -	100.0	100.0	- -	- -	- -	83.7	82.0	- -	- -	- -	91.7	89.3

Notes: 1. Clarendon exited in fiscal year 2004; individual results are not reported, but results are included in CHIP overall.

2. Superior entered as the CHIP EPO during the fiscal year 2004 study.

3. Match rates decreasing in SFY 2006 are shaded.

Endnotes

[1] 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*. Baltimore, MD.

[2] Institute for Child Health Policy. 2004. *Validating Encounter Data: Texas Medicaid Managed Care and Children's Health Insurance Program Managed Care Organization Medical Record Review, SFY 2002*. Gainesville, Florida: University of Florida.

[3] Institute for Child Health Policy. 2005. *Validating Encounter Data: Texas Medicaid Managed Care and Children's Health Insurance Program Managed Care Organization Medical Record Review, SFY 2003*. Gainesville, Florida: University of Florida.

[4] Institute for Child Health Policy. 2006. *Validating Encounter Data: Texas Medicaid Managed Care and Children's Health Insurance Program Managed Care Organization Medical Record Review, SFY 2004*. Gainesville, Florida: University of Florida.

[5] Institute for Child Health Policy. 2007. *Validating Encounter Data: Texas Medicaid Managed Care and Children's Health Insurance Program Managed Care Organization Medical Record Review, Fiscal Year 2005*. Gainesville, Florida: University of Florida.

[6] Sama, S. R., P. R. Hunt, P. Cirillo, et al. 2003. "A Longitudinal Study of Adult-Onset Asthma Incidence Among HMO Members." *Environmental Health* 2: 2-10.