Annual Chart Book

Fiscal Year 2005

NorthSTAR Program
Quality of Care Measures

Prepared by

The Institute for Child Health Policy
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The Texas External Quality Review Organization
for Medicaid Managed Care and CHIP

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Introduction

Assessing the quality of health care for all citizens is essential. In the case of Medicaid managed care and the State Children's Health Insurance Program (SCHIP), states are required to have performance goals and measures to evaluate the quality of care provided in the program.[1] There are several conceptual frameworks that can be used to organize quality of care assessments. The Institute of Medicine (IOM) has provided a framework for assessing health care quality that includes assessing 1) the effectiveness of care, 2) the access to and timeliness of care, and 3) the patient-centeredness of care.[2] Effectiveness of care refers to providing care that is based on systematically acquired evidence as to its benefit in producing better outcomes than the alternatives, which include doing nothing. Access to and timeliness of care refers to a person being able to receive needed care without undue delays. Insurance coverage is essential for good access to care but it is not a guarantee. Geographic barriers, lack of understanding about how to use the health care system, and other factors, can contribute to poor access to care, even among the insured. Finally, care should be patient-centered; that is, all patients should be treated with dignity and respect and they should be involved in the decision-making about their care.

In addition to the preceding aspects of care, the IOM specifically discusses the important relationship between payment polices and the quality of care provided to enrollees. Ensuring that payment is appropriate for the severity of illness or the case-mix seen among the enrolled population is essential to encourage access to care and the delivery of good quality of care.

Purpose

The purpose of this report is to provide an annual summary of the quality of care provided to enrollees in the NorthSTAR Program. This update is for September 1, 2004 to August 31, 2005, covering fiscal year 2005. This chart book is a follow-up to the NorthSTAR Program Annual Chart Book which covered quality of care measures for March 1, 2002 through February 28, 2003. Comparisons with results provided in these previously published chart books are not provided as there were several changes in data coding as requested by NorthSTAR staff. Recommendations are provided in the narrative of the report under the heading "Key Points."

The quality of care measures used in this annual chart book require one year of health care claims and encounter data for their calculations. Therefore, the full time frame used to prepare the measures is September 1, 2004 to August 31, 2005. A three month time lag was used for the claims and encounter data. Prior analyses with Texas data found that, on average, 96 percent of the claims and encounters were complete by that time period. A three month lag was also used because the Texas Health and Human Services Commission (HHSC) have requested reports that are as close to the actual time of service delivery as possible.

[1] The National Governors Association, Center for Best Practices. August 2001. *State Efforts to Evaluate the Progress and Success of SCHIP*.
[2] The Institute of Medicine. 2001. *Crossing the Quality Chasm*. Washington, DC: National Academy Press.

This chart book contains the following quality of care indicators grouped under associated headings:

1) Descriptive Information
   a) HEDIS® Total Unduplicated Members
   b) HEDIS® Total Unduplicated Members by Race and Ethnicity

2) Quality of Care
   a) HEDIS® Follow-Up After Hospitalization for Mental Illness
   b) Readmission Within 30 Days After an Inpatient Stay for Behavioral Health

3) Service Utilization[3]
   a) HEDIS® Mental Health Services Utilization- Members Receiving Inpatient, Day/Night, Ambulatory Services
   b) HEDIS® Mental Health Services Utilization- Members Receiving All Mental Health Services

Data Sources and Measures

Two data sources were used to calculate the quality of care indicators: person-level enrollment information and person-level health care claims/encounter data. The enrollment files contained information about the person's age, gender, and the number of months the person was enrolled in the program. The person-level claims/encounter data contained Physician's Current Procedural Terminology (CPT) codes and International Classification of Diseases, 9th Revision (ICD 9-CM) codes. NorthSTAR Program claims and encounter data were compiled for the time period of September 1, 2004 to August 31, 2005.

The National Committee for Quality Assurance (NCQA) Health Employer Data Set (HEDIS®) technical specifications, supplemented with Texas local codes were used to calculate the measures for follow-up after hospitalization for mental illness and mental health services utilization. Information regarding the calculation of all measures included in this report can be found in the document "Quality of Care Measures Technical Report Specifications, March 2006." This document, prepared by the Institute for Child Health Policy, provides specifications for both HEDIS® and other quality of care measures. This document also provides specific information regarding Texas local codes used in calculation of HEDIS® measures.

Whenever possible, comparisons are provided to other Medicaid Programs. NCQA gathers data from Medicaid managed care plans nationally and compiles them.[4] Submission of HEDIS® data to NCQA is a voluntary process; therefore, health plans that submit HEDIS® data are not fully representative of the industry. These health plans tend to be older, more likely to be federally qualified and more likely to be affiliated with a national managed care company than the population of health plans in the United States.[5]

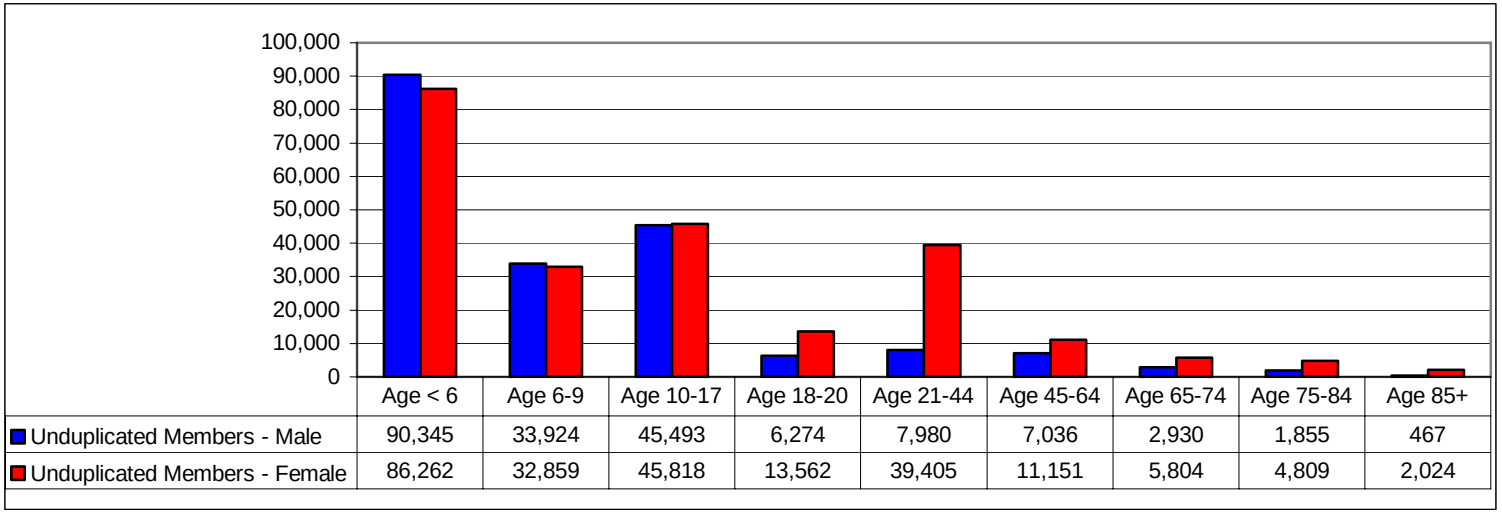
[3] The HEDIS® chemical dependency service utilization measure has been omitted as HEDIS® omitted this measure from their 2005 standards.
[4] The information that NCQA compiles for Medicaid Managed Care Programs can be viewed at www.ncqa.org
[5] Beaulieu, N.D., and A.M. Epstein. 2002. "National Committee on Quality Assurance Health-Plan Accreditation: Predictors, Correlates of Performance, and Market Impact." *Medical Care*. 40 (4): 325-337.

NCQA reports the national results at the 25th, 50th, 75th, and 90th percentiles for the participating plans. For comparison to the NorthSTAR Program findings, the NCQA Medicaid managed care plans 2004 mean results are shown and are labeled "HEDIS® Mean 2004" in the graphs. This information is not available for all of the quality of care indicators.

In addition to the narrative and graphs contained in this chart book, Excel spreadsheets were provided to HHSC that contain all of the key findings. The interested reader can review those for more details. The corresponding reference table is listed beneath each graph.

Chart 1. HEDIS® Total Unduplicated Members

NorthSTAR - September 1, 2004 to August 31, 2005 Total Unduplicated Members = 437,998



	Age < 6	Age 6-9	Age 10-17	Age 18-20	Age 21-44	Age 45-64	Age 65-74	Age 75-84	Age 85+
Unduplicated Members - Male	90,345	33,924	45,493	6,274	7,980	7,036	2,930	1,855	467
Unduplicated Members - Female	86,262	32,859	45,818	13,562	39,405	11,151	5,804	4,809	2,024

Reference: NorthSTAR Table TX-1

Key Points

1. During fiscal year 2005, there were 437,998 unduplicated Medicaid members in the NorthSTAR Program, which is slightly more than the 396,610 unduplicated members that were enrolled in the program during the time period of the previous annual report. Unduplicated enrollees represented 3,669,980 member months.

2. The average age of the membership is 14.1 years (± 17.97 years). Similar to the previous annual report, 40 percent of the enrollees are under 6 years old, 41 percent are between 6 and 20 years old, 15 percent are between 21 and 64 years old, and four percent are over the age of 65. Females comprise a slight majority of the enrollee pool at 55 percent.

3. The large number of child and adolescent enrollees provides opportunities to implement early screening and detection of mental health disorders and utilize preventive mental health and substance abuse care strategies such as home visiting for high-risk infants,[6] targeted short-term therapy for children under the age of 15 who have behavior problems,[7] or school-based mental health interventions. [8]

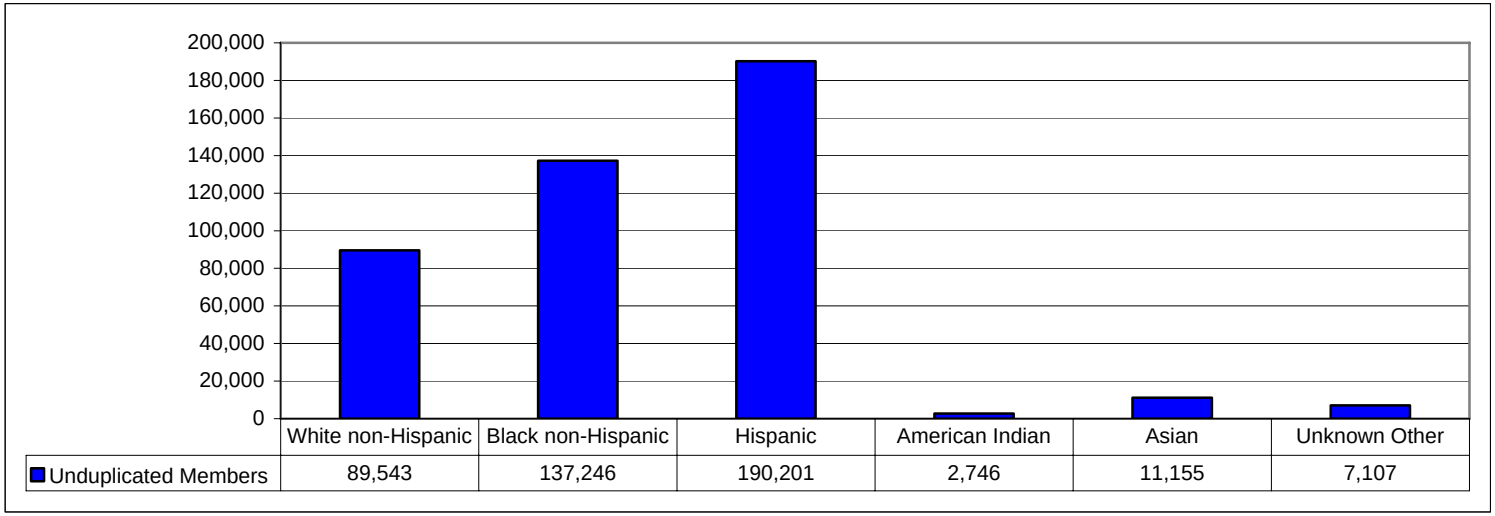
[6] Olds, D. L., J. Eckenrode, C.R. Henderson, H. Kitzman, J. Powers, R. Cole, K. Sidora, P. Morris, L.M. Pettitt, and D. Luckey. 1997. "Long-term effects of home visitation on maternal life course and child abuse and neglect." *Journal of the American Medical Association.* 278 (8) 637–643.

[7] Finney, J, A. Riley, and M. Cataldo. 1991. "Psychology in Primary Health Care: Effects of Brief Targeted Therapy on Children's Medical Care Utilization." *Journal of Pediatric Psychology.* 16 (4) 447–461.

[8] Durlak, J.A., and A.M. Wells. 1998. "Evaluation of indicated preventive intervention (secondary prevention) mental health programs for children and adolescents." *American Journal of Community Psychology.* 26 (5) 775–802.

Chart 2. HEDIS® Total Unduplicated Members by Race and Ethnicity

NorthSTAR - September 1, 2004 to August 31, 2005 Total Unduplicated Members = 437,998



	White non-Hispanic	Black non-Hispanic	Hispanic	American Indian	Asian	Unknown Other
Unduplicated Members	89,543	137,246	190,201	2,746	11,155	7,107

Reference: NorthSTAR Table TX-2

Key Points

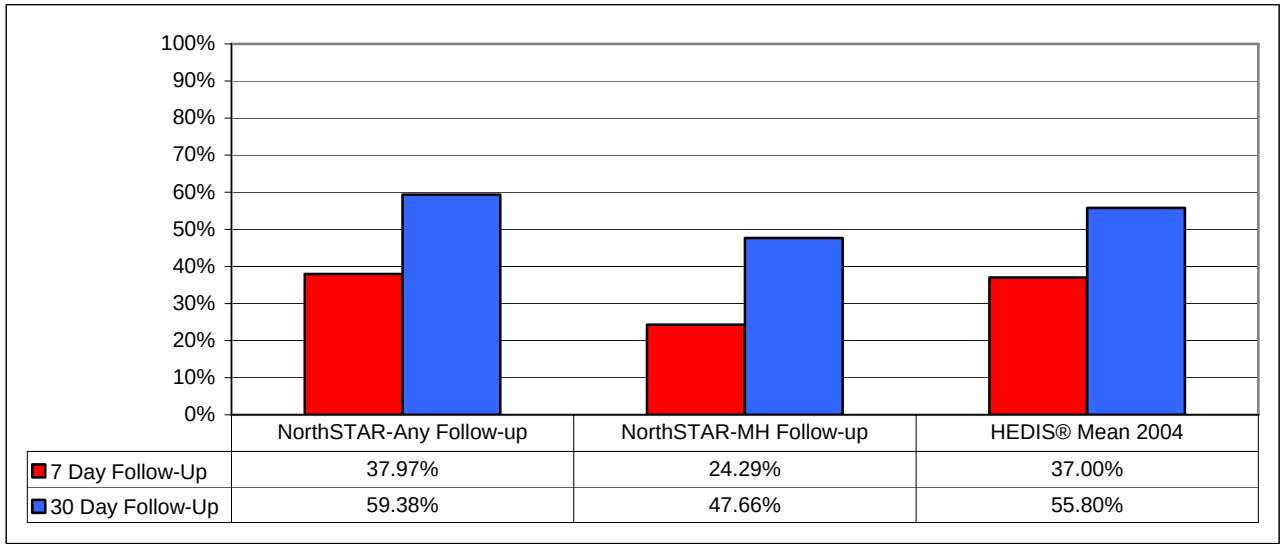
1. Hispanic enrollees made up 43 percent of the overall NorthSTAR Program membership. For this reporting period Black non-Hispanics represented 31 percent, and White non-Hispanics represented 20 percent. The remaining six percent of members were comprised of the following categories: American Indian, Asian, and unknown race/ethnicity. This distribution is similar to that exhibited in the previous annual report.

2. The NorthSTAR Program continues to have a racially and ethnically diverse membership. The issue of racial and ethnic disparities in behavioral health care use and outcomes is enormously complex. The State and ValueOptions face unique challenges in ensuring good access to culturally competent care for groups that are traditionally underserved by the mental health care delivery system.

Chart 3. HEDIS® Follow-Up after Hospitalization for Mental Illness

NorthSTAR - September 1, 2004 to August 31, 2005

Eligible Mental Health Hospitalizations = 1,519



	NorthSTAR-Any Follow-up	NorthSTAR-MH Follow-up	HEDIS® Mean 2004
7 Day Follow-Up	37.97%	24.29%	37.00%
30 Day Follow-Up	59.38%	47.66%	55.80%

Reference: NorthSTAR Table PI-5

Key Points

1. Ensuring continuity of care and providing follow-up in the community after inpatient stays for mental illness has been shown to reduce enrollees' health care costs and to improve their outcomes of care.[9] HEDIS® contains a measure designed to assess outpatient follow-up at seven days and 30 days post an inpatient stay for mental illness.

2. For the purposes of this chart book, outpatient follow-up is presented two different ways: mental health follow-up and any follow-up. "Mental Health Follow-up" is defined as an outpatient visit with a claim submitted with a mental health diagnosis. Furthermore, mental health follow-up is defined by diagnosis code as a surrogate for provider type which is not available in the NorthSTAR data. Also, rehabilitation, residential, and case management services are not included in the HEDIS® version of this measure because these services are not included in the HEDIS® specifications. The category "Any Follow-up" is included for informational purposes. For this category, ICHP extends the

[9] Fortney, J. G. Sullivan, K. Williams, C. Jackson, S. C., Morton, and P. Kogel. 2003. "Measuring Continuity of Care for Clients of Public Mental Health Systems." *Health Services Research* 38 (4): 1157-1175.

specifications to include any kind of outpatient visit following an inpatient discharge. This category includes rehabilitation, residential, outpatient, and emergency room services. It should be noted that this is for informational purposes only and is not a HEDIS® measure.

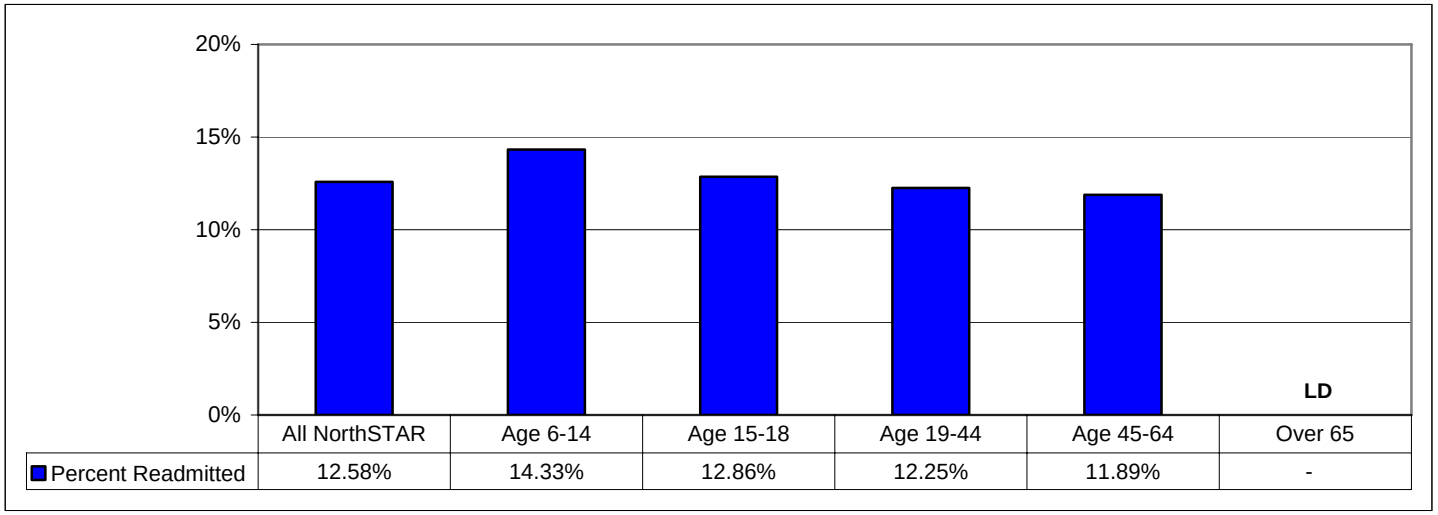
3. Twenty-four percent of NorthSTAR enrollees who had an inpatient admission for mental illness received a mental health follow-up outpatient visit within seven days. This is significantly lower than the HEDIS® 2004 mean for outpatient follow-up of 37 percent. Also these results are lower than the 39 percent of enrollees who experienced an outpatient follow-up within seven days during the prior annual report. Thirty-eight percent of NorthSTAR enrollees who had a psychiatric hospitalization received a non-specific follow-up outpatient visit within seven days. This is comparable to the HEDIS® 2004 mean.

4. Forty-eight percent of NorthSTAR enrollees who were discharged from inpatient psychiatric facilities received a mental health follow-up visit within 30 days of their inpatient admissions. The NorthSTAR 30 day follow-up results are lower than the 56 percent average for Medicaid Programs reporting to the NCQA. Fifty-nine percent of NorthSTAR enrollees who had an inpatient psychiatric stay received a non-specific follow-up visit within 30 days of their inpatient admissions. These results are comparable to the HEDIS® 2004 mean.

5. The results for this quality of care measure indicate that there is a need for improvement in specific mental health care provided to individuals who are discharged after an inpatient mental health hospitalization. While follow-up for visits of any type are comparable to the HEDIS® 2004 mean, specific mental health follow-up visits fall below that of Medicaid programs reporting to NCQA.

Chart 4. Readmission within 30 Days after an Inpatient Stay for Mental Health

NorthSTAR - September 1, 2004 to August 31, 2005 Eligible Mental Health Inpatient Stays = 1,741



	All NorthSTAR	Age 6-14	Age 15-18	Age 19-44	Age 45-64	Over 65
Percent Readmitted	12.58%	14.33%	12.86%	12.25%	11.89%	-

Reference: NorthSTAR Table PI-6

Note: LD (Low Denominator) indicates number of members eligible for the measure less than 30, with rate not reported. Eligible members are included in overall NorthSTAR rates.

Key Points

1. As more and more behavioral health services have come under the auspices of managed care, there has been an increasing emphasis placed on time-limited treatment in both inpatient and outpatient psychiatric settings. Also, as more efficacious psychotropic medications are developed and behavioral health treatment has focused on symptom stabilization during hospitalization, there has been a decline in daily census and a reduction in the average length of stay at many psychiatric institutions.[10] Some have made the case that while decreased length of stay does help contain behavioral health care costs, quality of care can be compromised.[11,12] For that reason, behavioral health readmissions are frequently used as a measure of an adverse outcome.[13]

[10] Mechanic, D., D. McAlpine, and M. Olfson. 1998. "Changing Patterns of Psychiatric Inpatient Care in the United States, 1988-1994." *Archives of General Psychiatry.* 55: 785-791.
[11] Lieberman, P. B., S. Wiitala, B. Elliott, et al. 1998. "Decreasing Length of Stay: Are There Effects on Outcomes of Psychiatric Hospitalization?" *American Journal of Psychiatry* 155: 905–909.
[12] Pincus H. A., D. Zarin, and J. West. 1996. "Peering into the 'Black Box'. Measuring Outcomes of Managed Care." *Archives of General Psychiatry* 53: 870–877.
[13] Figueroa, R., J. Harman, and J. Engberg. 2004. **"**Use of Claims Data to Examine the Impact of Length of Inpatient Psychiatric Stay on Readmission Rate." *Psychiatric Services* 55 (5): 560-5.

2. For this measure, eligible mental health inpatient stays were identified by using inpatient codes provided by NorthSTAR in conjunction with HEDIS® mental health diagnosis codes

3. National comparison data is not available for this measure; however, one small study conducted in a regional managed care company showed that 18 percent of patients discharged from any of seven psychiatric hospitals in the region were readmitted to a hospital during the 6-month follow-up period. About seven percent of the readmissions occurred within 30 days of discharge.[14]

4. Thirteen percent of NorthSTAR enrollees who were hospitalized for a mental health were readmitted to an inpatient facility within 30 days discharge. These results were slightly lower than the 16 percent of enrollees who were re-hospitalized within 30 days of discharge in the previous annual report.

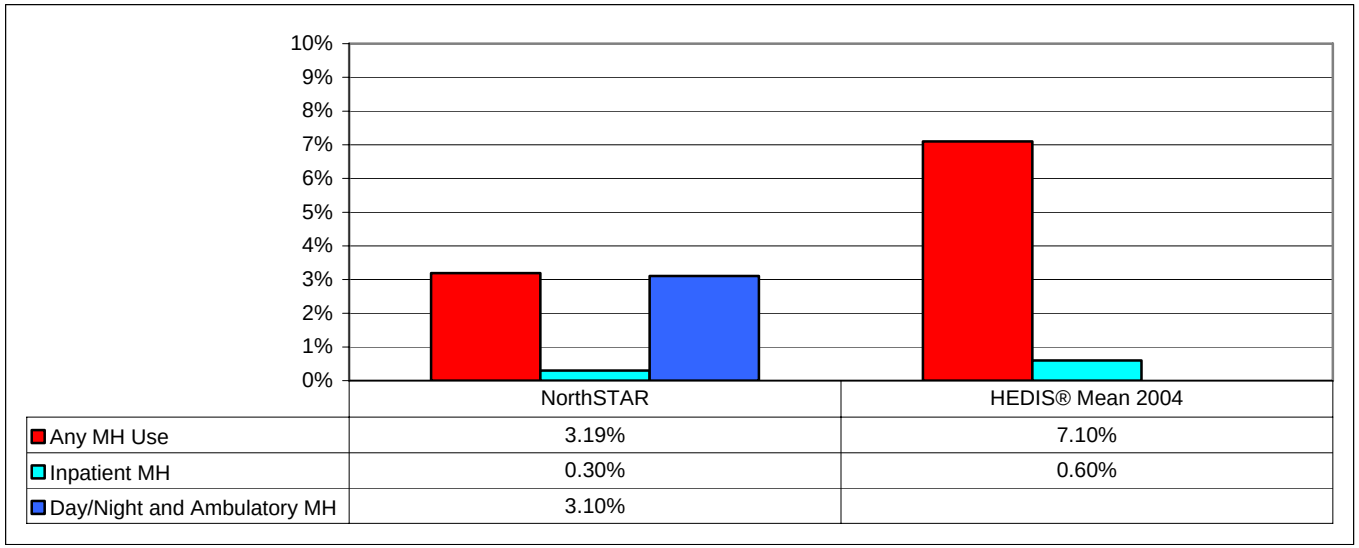
5. There was some variation in readmission rates among age groups. Children and adolescents had higher readmission rates than adults. There was a 14 percent readmission rate for children ages six to 14, and a 13 percent readmission rate for adolescents age 16 to 19 years old, compared to the adult admission rate of 12 percent.

6. Many factors can influence readmission to a psychiatric hospital or chemical dependency treatment center including patient severity, family resources, after care planning and community supports. Texas should consider identifying factors that account for higher readmission rates for children and the elderly in order to improve care for these vulnerable populations.

[14] Lyons, J., M. O'Mahoney, S. Miller, J. Neme, J. Kabat, and F. Miller. 1997. "Predicting Readmission to the Psychiatric Hospital in a Managed Care Environment: Implications for Quality Indicators." American Journal of Psychiatry. 154 (3): 337-40.

Chart 5. HEDIS® Mental Health Services Utilization- Members Receiving Inpatient, Day/Night, Ambulatory Services

NorthSTAR - September 1, 2004 to August 31, 2005 NorthSTAR Members = 437,998



	NorthSTAR	HEDIS® Mean 2004
Any MH Use	3.19%	7.10%
Inpatient MH	0.30%	0.60%
Day/Night and Ambulatory MH	3.10%	

Reference: NorthSTAR Table FP-3

Note: Day/Night and Ambulatory are combined due to inability to separate in NorthSTAR data. HEDIS® ambulatory mean is 6.80% and HEDIS® Day/Night mean is 6.90%.

Key Points

1. Chart 5 provides information regarding the mental health service utilization of NorthSTAR enrollees. This indicator includes mental health services as specified by HEDIS®, supplemented with Texas local codes. However, a small percentage of mental health services, such as rehabilitation services, are not included (see Chart 6 for further explanation).

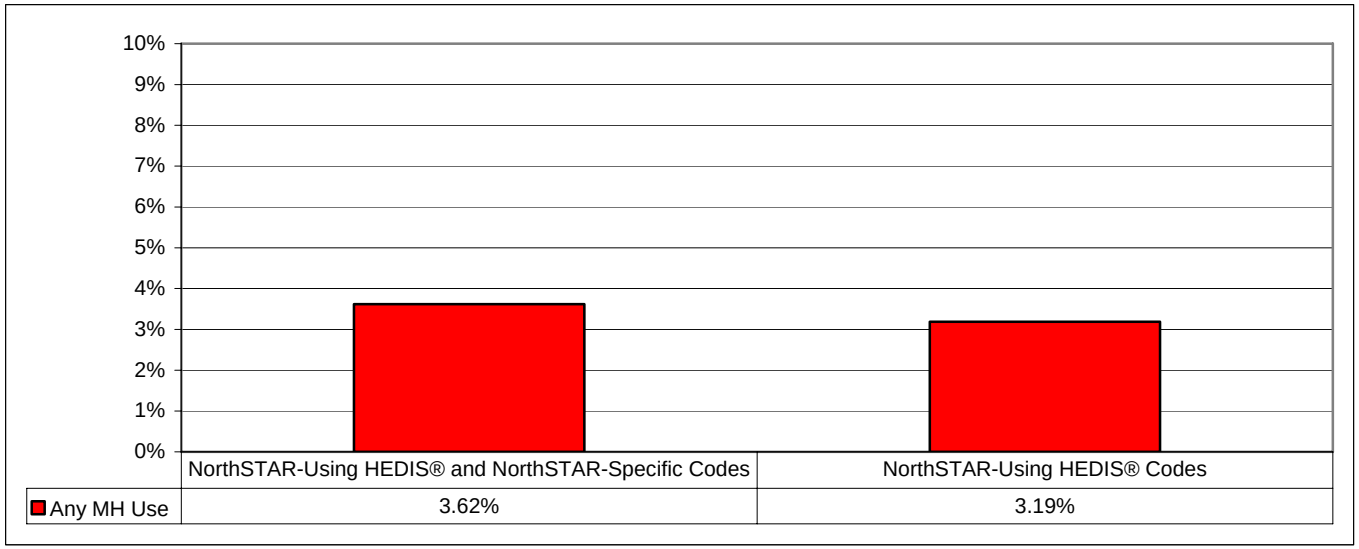
2. Ambulatory services and day/night services are reported together because it is not possible to differentiate the two with NorthSTAR data as submitted. Also, inpatient mental health utilization includes state psychiatric hospitalizations. Since state hospitalizations are not a part of HEDIS® specifications, this possibly overstates NorthSTAR inpatient use and therefore may not be comparable to mental health inpatient utilization of Medicaid programs reporting to NCQA.

3. When compared to the average use for Medicaid plans reporting to NCQA, NorthSTAR Program enrollees appear to have lower overall mental health care use (7.10 percent for Medicaid plans reporting to NCQA compared to 3.19 percent of NorthSTAR enrollees). NorthSTAR

Program mental health utilization is also lower than that of STAR MCO Program (3.78 percent). Due to lower than expected mental health care utilization for this managed behavioral health care organization, it is recommended that Texas review provider panels and outreach efforts to ensure NorthSTAR enrollees with mental health concerns have adequate access to appropriate services.

Chart 6. Mental Health Services Utilization- Members Receiving All Mental Health Services

NorthSTAR - September 1, 2004 to August 31, 2005 NorthSTAR Members = 437,998



Reference: NorthSTAR Table Table FP-3

Key Points

1. Chart 6 provides a comparison of mental health service utilization using HEDIS® definitions and mental health utilization with using HEDIS® definitions and specific NorthSTAR mental health services including rehabilitation, residential and emergency room services. The addition of NorthSTAR-specific services adds less than a half a percent to the percentage of NorthSTAR enrollees utilizing mental health services. Mental health utilization for NorthSTAR enrollees still falls short of the average utilization for Medicaid plans reporting to NCQA. It is recommended that ValueOptions policies and practices be reviewed to ensure adequate access for consumers with mental health needs.