



Institute for Child Health Policy at the University of Florida  
Texas External Quality Review Organization

# **Texas Medicaid Managed Care NorthSTAR Quality of Care Report**

**Fiscal Year 2010**

**Measurement Period:**

**September 1, 2009 through August 31, 2010**

**The Institute for Child Health Policy  
University of Florida**

**The External Quality Review Organization  
for Texas Medicaid Managed Care and CHIP**

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## Table of Contents

Executive Summary .....	1
Introduction.....	1
Methodology.....	1
Summary of Findings .....	3
Recommendations .....	4
The NorthSTAR Population .....	5
Utilization of Mental Health Services in NorthSTAR .....	6
Effectiveness of Behavioral Health Care in NorthSTAR .....	8
The Treatment of ADHD in Children .....	8
Effective Pharmacologic Management of Major Depression.....	9
Follow-up Care after Hospitalization for Mental Illness .....	10
Readmission within 30 Days after an Inpatient Stay for Mental Health.....	11
Endnotes.....	13

## List of Figures

Figure 1. Total Number of Unduplicated Members in NorthSTAR in August 2010.....	5
Figure 2. Distribution of NorthSTAR Members by Race/Ethnicity in August 2010.....	6
Figure 3. HEDIS® Mental Health Utilization – Any Service .....	7
Figure 4. HEDIS® Mental Health Utilization – Inpatient, Intensive, and Outpatient Services.....	7
Figure 5. Follow-up Care for Children Prescribed ADHD Medication .....	8
Figure 6. HEDIS® Antidepressant Medication Management.....	10
Figure 7. 7-Day and 30-day Follow-up Care after Hospitalization for Mental Illness .....	11
Figure 8. Readmission within 30 Days of an Inpatient Stay for Mental Health .....	12

# Executive Summary

## *Introduction*

This report provides an annual update of the quality of care provided to members in the NorthSTAR Program for the State of Texas, prepared by the Institute for Child Health Policy (IHP) at the University of Florida, the External Quality Review Organization (EQRO) for Texas Medicaid Managed Care. This update is for September 1, 2009, to August 31, 2010, covering State Fiscal Year (SFY) 2010.

NorthSTAR provides comprehensive and integrated mental health and substance abuse services based on clinical need to residents in Dallas and the nearby counties of Collin, Ellis, Hunt, Kaufman, Navarro, and Rockwall.<sup>1</sup> NorthSTAR contracts with ValueOptions, a BHO to provide behavioral health care services, with planning and oversight of services administered by the North Texas Behavioral Health Authority (NTBHA). Three Texas STAR Managed Care Organizations (MCOs) – AMERIGROUP, Parkland Community, and UniCare – offer behavioral health services through the NorthSTAR Program.<sup>2</sup>

This report provides descriptive information about the NorthSTAR population, utilization of services, and evaluation of the effectiveness of behavioral health care and treatment. Results for the following quality of care measures are presented in this report:

- HEDIS® Mental Health Utilization
- Follow-up Care for Children Prescribed ADHD Medication
- HEDIS® Antidepressant Medication Management
- Follow-up after Hospitalization for Mental Illness
- Readmission within 30 days after an Inpatient Stay for Mental Health

## *Methodology*

Three data sources were used to calculate the quality of care indicators: (1) member-level enrollment information, (2) member-level health care claims/encounter data, and (3) member-level pharmacy data. The enrollment files contain information about the person's age, gender, the MCO in which the member is enrolled, and the number of months the member has been enrolled in the program. The member-level claims/encounter data contain 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 member-level pharmacy data contain information about filled prescriptions, including the drug name, dose, date filled, number of days prescribed, and refill information.

Information regarding the calculation of all measures included in this report can be found in the document "Quality of Care Measures Technical Specifications Report, July 2011."<sup>3</sup> This

document, prepared by ICHP, provides specifications for HEDIS<sup>®</sup> and other quality of care measures.

Quality of care indicators in this report include: 1) The Healthcare Effectiveness Data and Information Set (HEDIS<sup>®</sup>) 2010 measures; and 2) a measure developed by ICHP. Rates for HEDIS<sup>®</sup> measures were calculated using National Committee for Quality Assurance (NCQA) certified software. In addition, an NCQA-certified auditor reviewed all of the results and provided letters of certification to ICHP. These letters and an official letter from NCQA providing their seal for the results are available from the Texas Health and Human Services Commission (HHSC).

At the request of HHSC, claims data from the STAR Program and Fee-for-service (FFS) for behavioral health services in the Dallas Service Area were also included in the calculation of NorthSTAR quality of care results. For each measure, results are provided for: 1) NorthSTAR-only; 2) NorthSTAR and STAR; and 3) NorthSTAR, STAR, and FFS. The rationale for including this data is that NorthSTAR members may seek behavioral health services from STAR providers, which if not accounted for, underestimates the quality of care provided to NorthSTAR members.

In addition, at the request of HHSC, the EQRO developed a methodology to allow for flexibility in the provider specialty codes when determining eligibility for certain HEDIS<sup>®</sup> measures. The following measures rely on specific provider specialty codes, and are therefore affected by this change in methodology, particularly for combined NorthSTAR and STAR results:

- Follow-up Care for Children Prescribed ADHD Medication
- Follow-up After Hospitalization for Mental Illness

For these measures, the name HEDIS<sup>®</sup> has been removed from the titles, as these measures do not adhere precisely to NCQA specifications and their results are likely inflated from the lifting of provider constraints.

Results from other Medicaid Programs are provided for all quality measures when available. NCQA gathers and compiles data from Medicaid Managed Care Plans nationally.<sup>4</sup> Submission of HEDIS<sup>®</sup> data to NCQA is a voluntary process; therefore, health plans that submit HEDIS<sup>®</sup> data are not fully representative of the industry. Health plans participating in NCQA HEDIS<sup>®</sup> 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.<sup>5</sup> NCQA reports the national results as a mean and at the 10th, 25th, 50th, 75th, and 90th percentiles for the participating plans. The Medicaid Managed Care Plans 2010 mean results are shown and labeled “HEDIS<sup>®</sup> Mean” in the graphs. The national rates are provided as additional information only and are not meant to be directly compared to the NorthSTAR Program. NorthSTAR members are demographically distinct (e.g., in terms of age and mental health status) from the national Medicaid population.

A six month time lag was used for the claims and encounter data. Prior analyses with Texas data showed that, on average, over 96 percent of the claims and encounters are submitted and adjudicated by that time.

In addition to the narrative and graphs contained in this chart book, technical appendices were provided to HHSC that contain all of the data to support key findings.<sup>6</sup> The interested reader can review those for more details. The corresponding reference table is listed beneath each graph.

The summary of findings section provides NorthSTAR results that include STAR and FFS claims data in the Dallas Service Area for each behavioral health measure except for the management of depression.

NorthSTAR Enrollee Demographics – August 2010

Number of members: 421,202

Average enrollee age: 14.2 years

Gender	Percent of NorthSTAR Members
Female	52%
Male	48%

Race/ethnicity	Percent of NorthSTAR Members
Hispanic	49%
Black, non-Hispanic	29%
White, non-Hispanic	16%

**Summary of Findings**

- *Mental health utilization.* Nine percent of members received a mental health service in NorthSTAR during the measurement period, most commonly an outpatient or emergency department service.
- *Follow-up care for children with ADHD.* Fifty-three percent of children had a follow-up visit within 30 days of being dispensed an ADHD medication, and 67 percent had additional follow-up visits in the following 9 months, as they continued medication treatment for ADHD.
- *Management of depression.* Fifty-five percent of NorthSTAR members including STAR members in the Dallas SA who were treated for major depression with antidepressant medication continued to take this medication for three months, and 42 percent continued to take this medication for at least six months.
- *Follow-up care after hospitalization for mental illness.* Among NorthSTAR members hospitalized for a mental health disorder, 30 percent had a follow-up visit within 7 days of discharge from the hospital, and 62 percent had a follow-up visit within 30 days of discharge from the hospital.
- *Mental health readmissions.* The NorthSTAR Program rate for mental health readmission within 30 days was 16 percent.

## Recommendations

Domain	Recommendations	Rationale	DSHS recommendations/ strategies
<p>Follow-up care after hospitalization for mental illness</p>	<p>As ICHP recommended in the SFY 2009 NorthSTAR Quality of Care Report and the SFY 2010 Quarterly Topic Report #3,<sup>7, 8</sup> the NorthSTAR Program should evaluate discharge planning policies and procedures among NorthSTAR providers, and ensure that members are effectively linked to outpatient care and community support prior to discharge.</p> <p>In addition to scheduling follow-up, outpatient appointments prior to discharge, and providing appointment reminders to patients, providers in NorthSTAR should implement elements of “bridging interventions” and/or strengthen current efforts to reduce gaps in patient care following a mental health hospitalization.</p> <p>Bridging interventions include:</p> <ul style="list-style-type: none"> <li>• Beginning outpatient care prior to discharge;</li> <li>• Ensuring that outpatient providers receive a patient’s discharge plans;</li> <li>• Teaching patients the skills needed to transition back to living in the community; and</li> <li>• Providing peer support and transitional care by inpatient staff.<sup>9, 10</sup></li> </ul> <p>NorthSTAR should also identify members at greatest risk for not receiving follow-up care, and provide these members with post-discharge home visits and intensive case management services. Research has found that home-based visits and home-based intervention therapies improve 7-day follow-up and decrease the risk of rehospitalization.<sup>11</sup></p>	<p>Rates of follow-up care after a mental health-related hospitalization were lower than expected in NorthSTAR, based on comparisons to national rates and the performance of other Texas Medicaid Programs such as STAR,<sup>12</sup> STAR+PLUS,<sup>13</sup> and STAR Health<sup>14</sup> in providing follow-up care to its membership.</p> <p>Thirty percent of NorthSTAR members had a follow-up visit within 7 days of discharge, compared to 43 percent nationally.</p>	<p>DSHS staff will work in concert with the local behavioral health authority for the NorthSTAR service area (North Texas Behavioral Health Authority) to focus on the discharge process, to include the hospitals, and specialty mental health outpatient provider linkages with discharging hospitals. This measure is currently tracked in the two main tracking reports for NorthSTAR</p> <p>Website:  <a href="http://www.dshs.state.tx.us/mhsa/northstar/databook.shtm">http://www.dshs.state.tx.us/mhsa/northstar/databook.shtm</a>.</p> <p>The data in these measures will be further drilled down to specific cohorts (such as age, Medicaid/non Medicaid status of enrollee), discharging hospital name and receiving specialty mental health outpatient provider name. If required, site reviews of the process by DSHS, NTBHA and NorthSTAR BHO will be conducted to better examine root cause.</p>

			Also, the current BHO contract has incentives and penalties to focus on performance improvement in this area.
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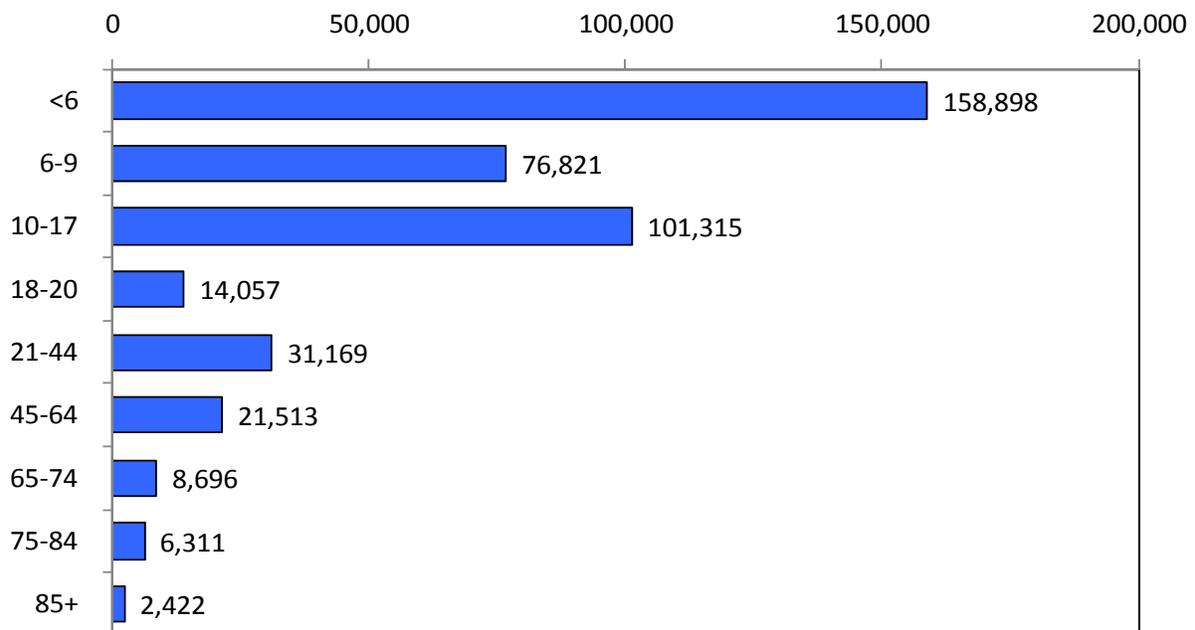
## The NorthSTAR Population

There were 421,202 unduplicated members in the NorthSTAR Program in August 2010. Slightly more than half of the NorthSTAR population was female (52 percent). The average age of members was 14.2 years (SD = 18.10).

**Figure 1** provides the number of unduplicated NorthSTAR members by age cohort in August 2010.

The majority of NorthSTAR members were under the age of 18 years (80 percent), with the largest percentage under the age of six years (38 percent).

**Figure 1. Total Number of Unduplicated Members in NorthSTAR in August 2010**

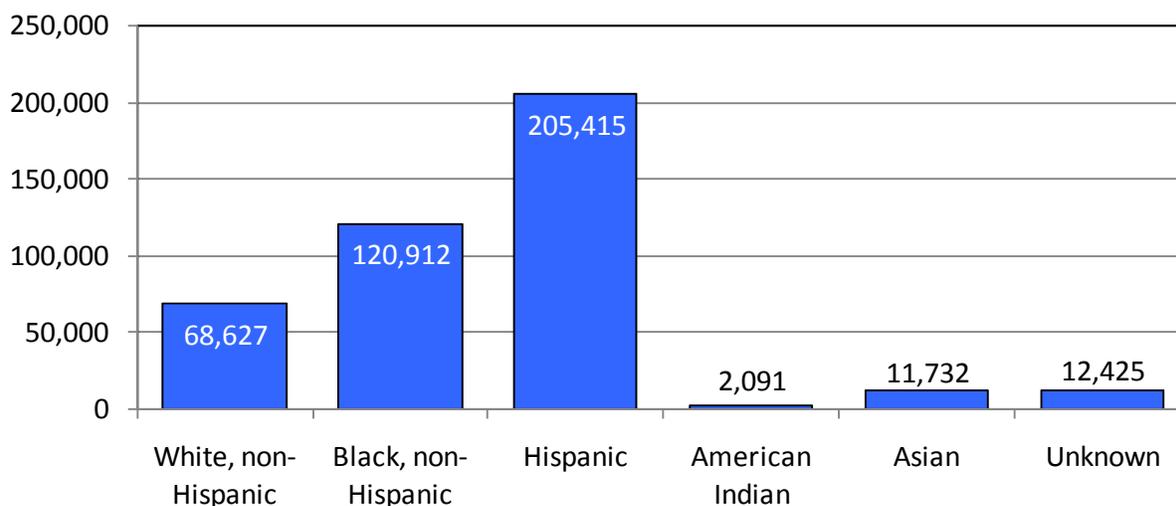


Reference: Table 1

**Figure 2** provides the distribution of NorthSTAR members by race/ethnicity in August 2010. Forty-nine percent of NORTHSTAR members were Hispanic, followed by Black, non-Hispanic (29 percent), and White, non-Hispanic (16 percent).

NorthSTAR members of Asian race/ethnicity accounted for less than three percent of the enrollee population, and those of American Indian race/ethnicity accounted for less than one percent. Three percent of NorthSTAR members could not be classified by race/ethnicity using the claims data.

**Figure 2. Distribution of NorthSTAR Members by Race/Ethnicity in August 2010**



Reference: Table 2

## Utilization of Mental Health Services in NorthSTAR

**Figures 3 and 4** present results for the HEDIS<sup>®</sup> Mental Health Utilization measure. This measure provides the percentage of NorthSTAR members receiving the following types of mental health services during the measurement period: 1) Any type of mental health service; 2) Inpatient services; 3) Intensive outpatient or partial hospitalization services; and 4) Outpatient or emergency department services.

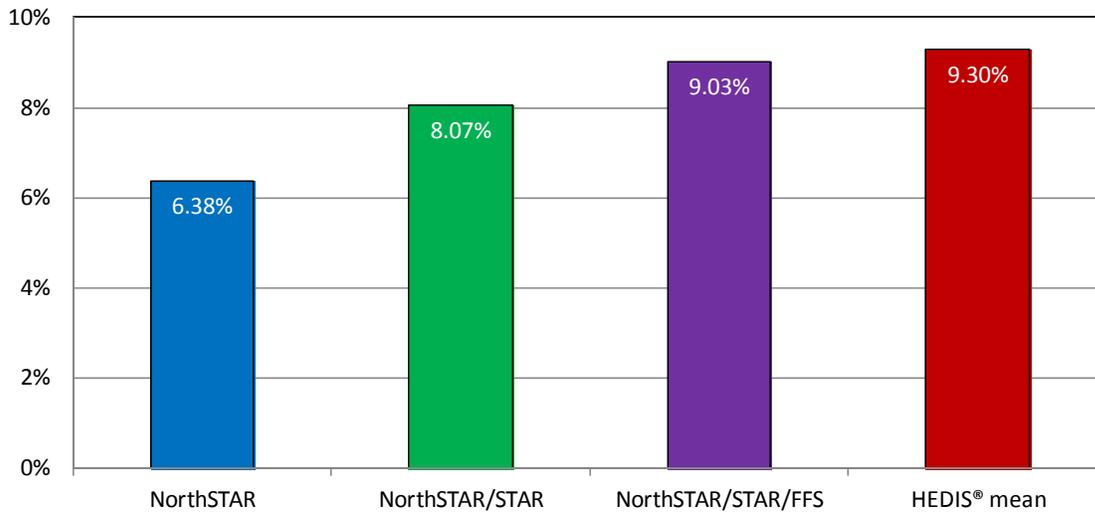
Six percent of NorthSTAR members received mental health services of any type during the measurement period. Mental health utilization of any service increased to 9 percent when STAR and FFS were included in the calculation of this rate.

The most commonly utilized mental health service among the NorthSTAR membership was outpatient services. The rate of outpatient mental health service utilization was:

- 6 percent in NorthSTAR
- 8 percent in NorthSTAR and STAR
- 9 percent in NorthSTAR, STAR, and FFS

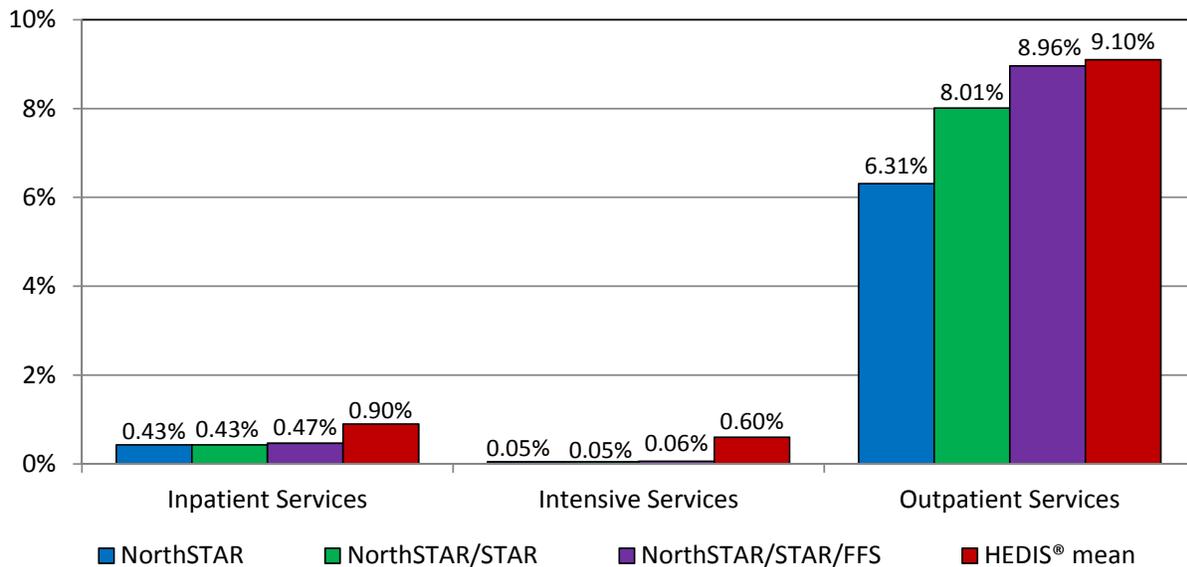
Utilization of outpatient services in NorthSTAR combined with STAR and FFS data is comparable to the national Medicaid average of 9 percent.

**Figure 3. HEDIS® Mental Health Utilization – Any Service**



Reference: Table MPT

**Figure 4. HEDIS® Mental Health Utilization – Inpatient, Intensive, and Outpatient Services**



Reference: Table MPT

# Effectiveness of Behavioral Health Care in NorthSTAR

## The Treatment of ADHD in Children

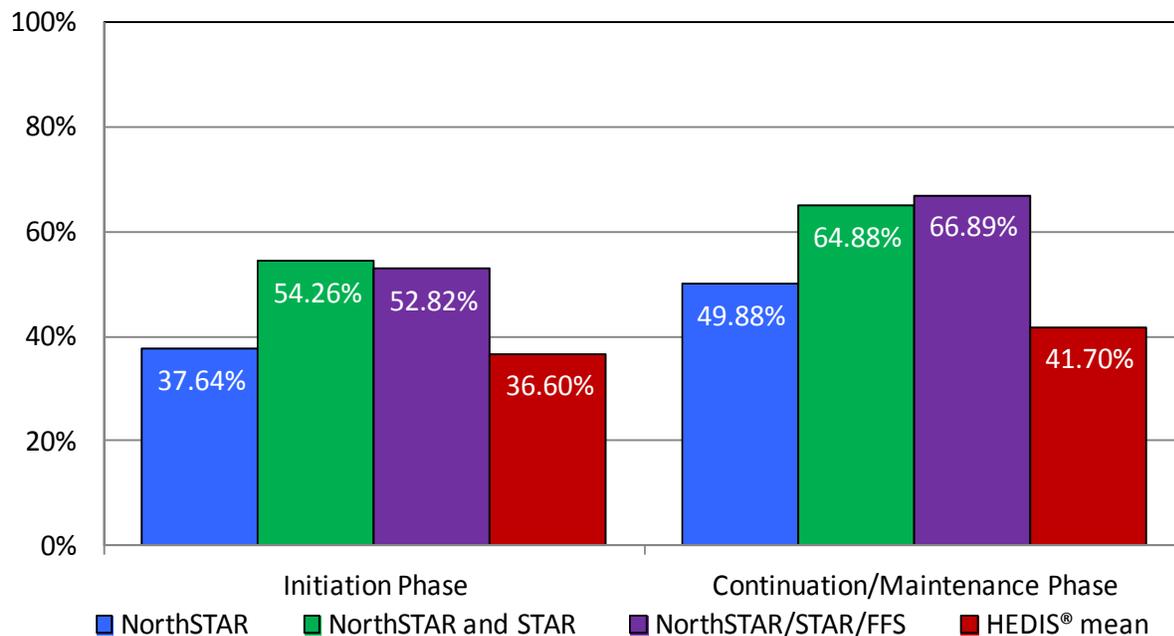
Figure 5 presents results for the Follow-up Care for Children Prescribed ADHD Medication measure, which provides the percentage of NorthSTAR members six to 12 years of age and newly diagnosed with ADHD, who received follow-up care during the measurement period.

Two separate rates are reported: 1) The *Initiation Phase* shows the percentage of children with an ambulatory prescription dispensed for ADHD medication who had a follow-up visit with a provider within 30 days after beginning medication treatment; and 2) The *Continuation and Maintenance Phase* shows the percentage of children with an ambulatory prescription dispensed for ADHD medication who continued taking the medication for at least 210 days (30 weeks), and who had at least two follow-up visits with the provider within nine months after the end of the initiation phase.

Thirty-eight percent of children who were dispensed a new medication to treat ADHD had a follow-up visit with a NorthSTAR provider within 30 days of prescription (*Initiation Phase*).

Among children who took ADHD medication continuously for 30 weeks, 50 percent had at least two additional follow-up visits with a NorthSTAR provider in the nine months after initiating treatment (*Continuation and Maintenance Phase*).

Figure 5. Follow-up Care for Children Prescribed ADHD Medication



Reference: Table ADD

Children in NorthSTAR received effective care for ADHD, compared to national benchmarks, particularly for long-term management of ADHD (50 percent vs. 42 percent nationally).

The inclusion of claims from the STAR Program and FFS increased the rates of ADHD follow-up in NorthSTAR to 53 percent in the *Initiation Phase*, and to 67 percent in the *Continuation and Maintenance Phase*. These findings indicate that some children who were diagnosed with ADHD and dispensed medication by a behavioral health provider in NorthSTAR were seeking follow-up care with a STAR provider.

### ***Effective Pharmacologic Management of Major Depression***

**Figure 6** provides the HEDIS® Antidepressant Medication Management (AMM) measure, which assesses the effectiveness of pharmacological management of major depression in individuals 18 years of age and older. This measure addresses both the acute and continuation phases of treatment:

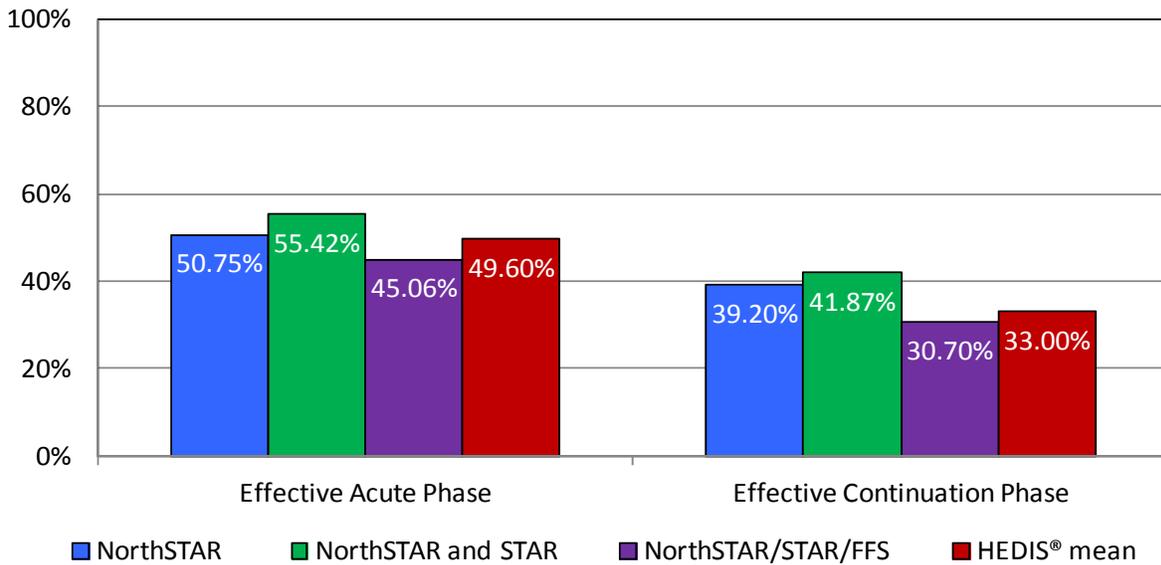
- The *Effective Acute-Phase Treatment* measure shows the percentage of adults diagnosed with a new episode of major depression that were treated with an antidepressant medication and remained on the medication for the entire 12 weeks of the acute treatment period.
- The *Effective Continuation-Phase Treatment* measure shows the percentage of adults diagnosed with a new episode of major depression that were treated with an antidepressant medication and who continued to take the medication for at least 180 days.

Fifty-one percent of members prescribed an antidepressant for major depression took the medication for at least three months, and 39 percent took the medication for at least six months.

In NorthSTAR, the percentage of members with major depression that took an antidepressant medication for at least six months was higher than the national Medicaid average (39 vs. 33 percent).

The inclusion of STAR data only slightly improved the pharmacologic management of major depression in NorthSTAR – 55 percent in the *Acute-Phase* and 42 percent in the *Continuation-Phase* of treatment.

**Figure 6. HEDIS® Antidepressant Medication Management**



Reference: Table AMM

### ***Follow-up Care after Hospitalization for Mental Illness***

**Figure 7** provides the percentage of NorthSTAR Program members six years of age or older who were hospitalized for mental illness and who had an outpatient visit, an intensive outpatient encounter, or a partial hospitalization with a provider during the measurement period, distributed by MCO. Two percentages are shown – one for follow-up within 7 days of discharge, and one for follow-up within 30 days of discharge.

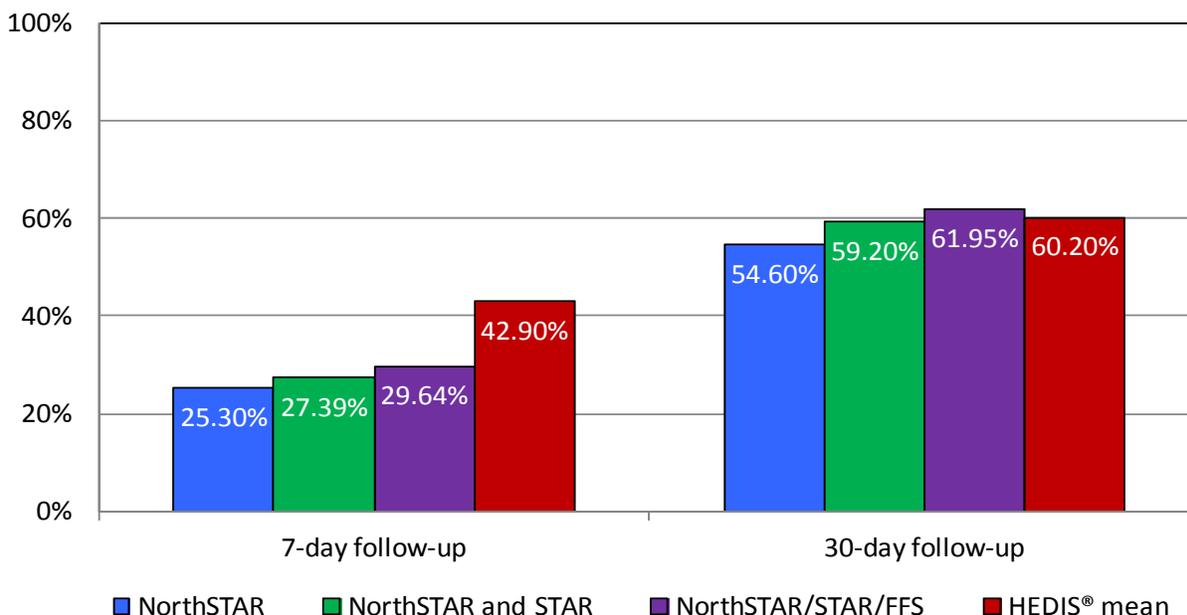
The percentage of NorthSTAR members receiving follow-up care after hospitalization for a mental health disorder was lower than would be expected based on comparison to benchmarks from a national Medicaid population. One out of four NorthSTAR members received 7-day follow-up care after a mental health-related hospitalization (25 percent), compared to the national average of 43 percent.

Fifty-five percent of NorthSTAR members received 30-day follow-up care after a mental health-related hospitalization, compared to the national rate of 60 percent.

The inclusion of STAR and FFS data improved the rates of follow-up care in NorthSTAR by:

- 5 percentage points for 7-day follow-up (30 vs. 25 percent).
- 7 percentage points for 30-day follow-up (62 vs. 55 percent).

**Figure 7. 7-Day and 30-day Follow-up Care after Hospitalization for Mental Illness**



Reference: Table FUH

### ***Readmission within 30 Days after an Inpatient Stay for Mental Health***

The Readmission within 30 Days after an Inpatient Stay for Mental Health measure provides the percentage of members who were readmitted within 30 days following an inpatient stay for a mental health disorder. Mental health readmissions are frequently used as a measure of an adverse outcome, which potentially results from efforts to contain behavioral health care costs, such as reducing the initial length of stay.<sup>15</sup> For this measure, low rates of readmission indicate good performance.

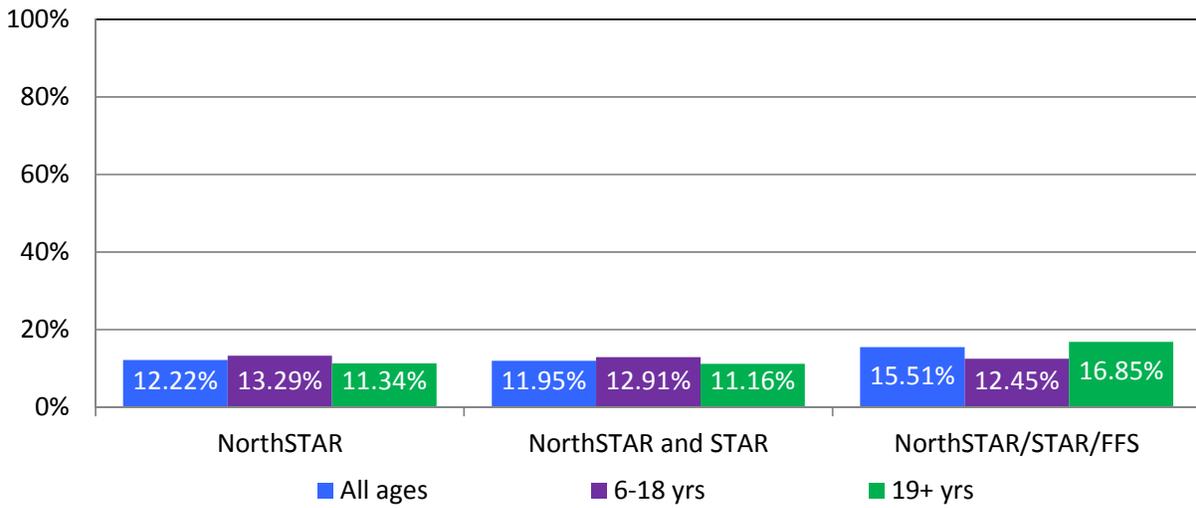
**Figure 8** provides the percentage of NorthSTAR members who were readmitted within 30 days following an inpatient stay for a mental health disorder, distributed by MCO, separately for members 0 to 18 years old and members 19 years of age and older.

The mental health readmission rate in the NORTHSTAR Program for all age cohorts was 12 percent, with child and adolescent members having a slightly higher mental health readmission rate than adult members (13 vs. 11 percent).

The percentage of members readmitted within 30 days following an inpatient stay for a mental health disorder in SFY 2010 was comparable to SFY 2009 (12 percent in each year).

When STAR and FFS were included in the calculation of this measure, the mental health readmission rate for all age cohorts increased by four percentage points to 16 percent.

**Figure 8. Readmission within 30 Days of an Inpatient Stay for Mental Health**



Reference: Table MHReadmit v2

## Endnotes

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<sup>1</sup> DSHS (Texas Department of State Health Services). 2009. "NorthSTAR and Special Initiatives." Available at <http://www.dshs.state.tx.us/mhsa/northstar/northstar.shtm>.

<sup>2</sup> AMERIGROUP provides behavioral health services through NorthSTAR only in the Dallas SDA. In all other SDAs in which AMERIGROUP operates (Bexar, Harris, Harris Expansion, Nueces, Tarrant, and Travis), behavioral health services are offered in-house.

<sup>3</sup> The Institute for Child Health Policy. (ICHP). 2011.<sup>a</sup> *Quality of Care Measures Technical Specifications Report, July 2011*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

<sup>4</sup> The information that NCQA compiles for Medicaid Managed Care Programs can be viewed at [www.ncqa.org](http://www.ncqa.org).

<sup>5</sup> 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.

<sup>6</sup> ICHP. 2011.<sup>b</sup> *Texas Medicaid Managed Care, NorthSTAR Quality of Care Report Measures, Fiscal Year 2010: Technical Appendix*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

<sup>7</sup> ICHP. 2011.<sup>c</sup> *Texas Medicaid Managed Care, NorthSTAR, Quality of Care Measures, Fiscal Year 2009*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

<sup>8</sup> ICHP. 2010. *SFY 2010 Quarterly Topic Report #3: The Quality of Behavioral Health Services in STAR, NorthSTAR, and CHIP*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

<sup>9</sup> Boyer, C. A., D. D. McAlpine, K. J. Pottick, and M. Olsson. 2000. "Identifying Risk Factors and Key Strategies in Linkage to Outpatient Psychiatric Care." *American Journal of Psychiatry* 157(10): 1592-1598.

<sup>10</sup> Reynolds, W., W. Lauder, S. Sharkey, S. Maciver, T. Veitch, and D. Cameron. 2004. "The Effects of a Transitional Discharge Model for Psychiatric Patients." *Journal of Psychiatric and Mental Health Nursing* 11: 82-88.

<sup>11</sup> Gomez, M. Y. 2008. "Discharging Patients with Behavioral Disorders." *Hospital Case Management* 16(12): 187-190.

<sup>12</sup> ICHP. 2011.<sup>d</sup> *Texas Medicaid Managed Care, The STAR Program, Quality of Care Report, Fiscal Year 2010*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

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<sup>13</sup> ICHP. 2011.<sup>e</sup> *Texas Medicaid Managed Care, STAR+PLUS, Quality of Care Report, Fiscal Year 2010*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

<sup>14</sup> ICHP. 2011.<sup>f</sup> *Texas Medicaid Managed Care, STAR Health, Quality of Care Report, Fiscal Year 2010*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

<sup>15</sup> Figueroa, R., J. Harman, and J. Engberg. 2004. "Use of claims data to examine the impact of length of inpatient psychiatric stay on readmission rates." *Psychiatric Services* 55(5): 560-565.