HIV TREATMENT GUIDELINE COMPLIANCE AMONG TREATMENT-NAÏVE MISSISSIPPI MEDICAID ADULT BENEFICIARIES

Przybyla SM[1], Banahan BF III[1], Null KD[1], Hardwick SP[2], Clark JP[2]

[1] Center for Pharmaceutical Marketing and Management and Department of Pharmacy Administration, University of Mississippi, University, MS

[2] Mississippi Division of Medicaid, Jackson, MS

MS|DUR Evidence-Based DUR Initiative
The University of Mississippi School of Pharmacy

Mississippi Division of Medicaid
Quality Health Care Services, Improving Lives

BACKGROUND

- Research has consistently demonstrated the effectiveness of antiretroviral therapy (ART) in reducing HIV-related morbidity and mortality.
- Since 1998, the U.S. Department of Health and Human Services (DHHS) has issued Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults Guidelines[1], which are updated periodically by an expert panel as new clinical information emerges regarding drug efficacy, safety, and convenience.[2]
- While DHHS guidelines are intended to assist prescribers in choosing initial regimens, clinicians may not always adhere to them due to a failure to understand or consult guidelines or a lack of awareness of their existence[3]
- As prescribers are tasked with offering a regimen that is effective, tolerable, and long-lasting,[4] it is important to ascertain strategies to extend the success of initial ART regimens[5]
- Few U.S. studies have examined compliance of treatment patterns with DHHS guidelines, particularly among treatment-naïve adults.

OBJECTIVES

The objective of this study was to retrospectively assess compliance with DHHS-issued ART guidelines among treatment-naïve individuals who are Medicaid beneficiaries in Mississippi.

METHODS

Data

The study design was a retrospective observational analysis of Mississippi Medicaid prescription claims data (January 2008 to December 2011).

Sample Selection Criteria

Medicaid beneficiaries were included in this analysis based on the following inclusion criteria:
- Age 18 or older at ART initiation
- Not pregnant
- Enrolled in Medicaid for at least 6 months prior to the index prescription date
- Receiving ART for at least 6 months after the index prescription date

Operational Definitions
- Beneficiaries were considered treatment-naïve and starting initial ART if they were continuously enrolled and had no ART claims for at least 6 months.
- Between July 2008 and September 2011, we defined an ART regimen meeting DHHS guidelines as use of a minimum of three drugs including two nucleoside reverse transcriptase inhibitors (NRTIs) in combination with one protease inhibitor (PI) or one nonnucleoside reverse transcriptase inhibitor (NNRTI) that was listed as "preferred" or "alternate" regimens.
- Between January 2010 and December 2011, an ART regimen meeting DHHS guidelines was expanded to include two NRTIs in combination with one integrase inhibitor.

RESULTS

A total of 758 HIV-positive beneficiaries met eligibility criteria and initiated ART between July 2008 and September 2011. Overall, the majority were Black (78.0%), 53.3% were female, and the average age was 38.9 years.

Demographic Characteristics of Study Sample (N=758)

	2008 n (%)	2009 n (%)	2010 n (%)	2011 n (%)	Total n (%)
Age [M (SD)]	40.4 (10.2)	39.3 (11.3)	37.8 (10.7)	38.8 (11.4)	38.9 (11.1)
Gender					
Female	48 (47.5)	144 (51.6)	123 (56.2)	89 (56.0)	404 (53.3)
Race/Ethnicity					
Black	85 (84.2)	210 (75.3)	165 (75.3)	131 (82.4)	591 (78.0)
White	10 (9.9)	46 (16.5)	38 (17.4)	17 (10.7)	111 (14.6)
Other[1]	6 (5.9)	23 (8.2)	16 (7.3)	11 (6.9)	56 (7.4)

[1] Other = American Indian, Hispanic, and Asian

- Beneficiaries meeting a DHHS regimen had a higher mean number of drugs (3.55) than those not meeting regimen (2.68) (p <.001).

Mean Number of ART Drugs Prescribed by Study Quarter
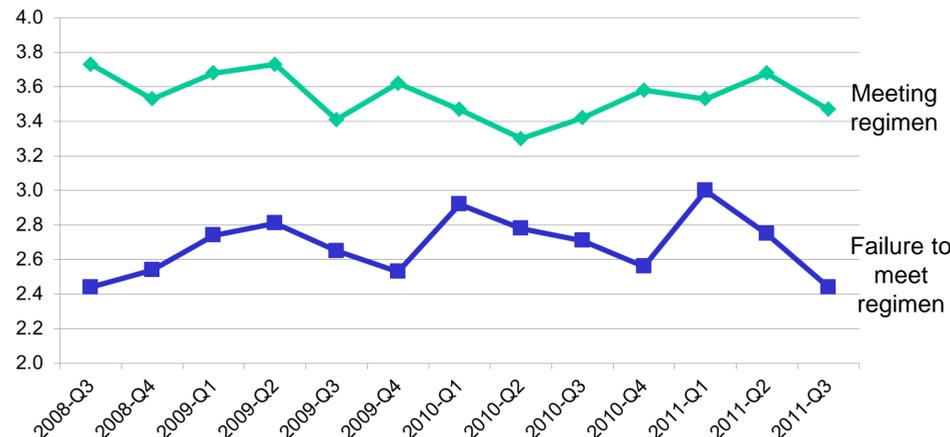
- In the study period, 77.0% of beneficiaries were on a preferred or alternate ART treatment regimen consistent with DHHS guidelines (range 69.8-86.4%).
- Overall, 3.6% of beneficiaries met DHHS guidelines on more than one regimen simultaneously.
- NNRTI-based regimens were the most common ART regimen meeting DHHS guidelines for 13 of the 14 quarters of the study period.

Percentage of Beneficiaries on ART Regimen Meeting Guidelines by Study Quarter
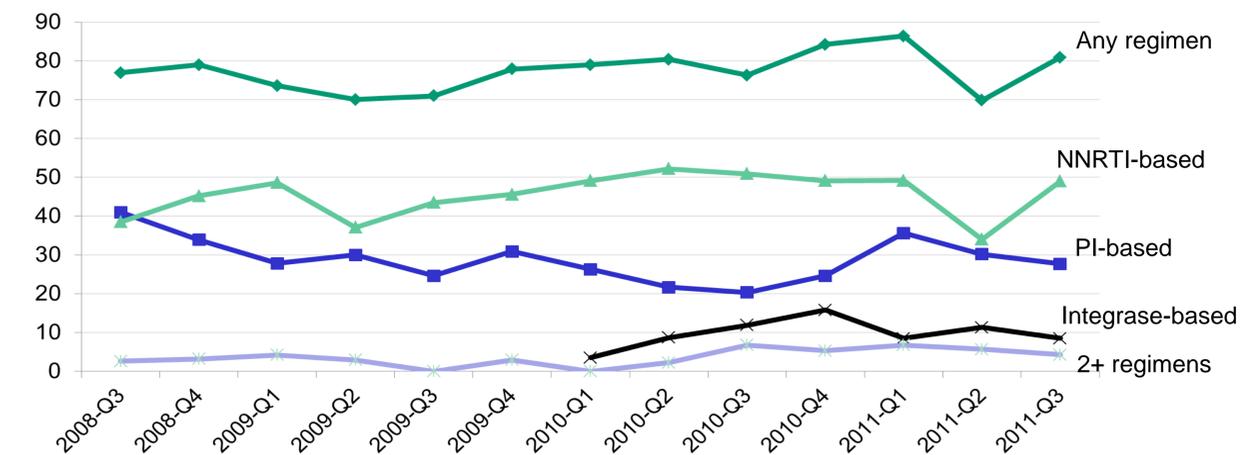
CONCLUSIONS

During the four-year period observed, no major trends were observed in the percentage of HIV patients receiving regimens that met DHHS guidelines or in the regimens being used.

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ACKNOWLEDGEMENT