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Disparities in State Medicaid Coverage of Tretinoin for Pigmentary Disorders Compared to Acne Vulgaris

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ABSTRACT

Background: Melasma and post-inflammatory hyperpigmentation (PIH) are common cosmetic dermatologic conditions that predominantly affect patients with skin phototypes III-VI. Comparing treatment coverage for these pigmentary disorders to treatment coverage for acne vulgaris may demonstrate disparities in insurance coverage for diseases that primarily affect patients of color.

Objective: Describe differences in Medicaid coverage for topical tretinoin for melasma and PIH vs. acne vulgaris in all 50 states and the District of Columbia.

Methods: This is a cross-sectional study of Medicaid insurance plans in all 50 states and the District of Columbia conducted between February 1 and 28, 2023. Data was collected from online publicly available preferred drug lists, prior authorization criteria, and email/telephone inquiries. Information was collected regarding coverage restrictions, including age restrictions, diagnostic restrictions, preferred drug status, and prior authorization requirements.

Results: Complete coverage data for all three clinical indications was retrieved from 30 (58.8%) states; partial coverage data for acne vulgaris was retrieved from 16 (31.4%) states; no coverage data was retrieved from 5 (9.8%) states. Of states reporting coverage data, topical tretinoin is covered in 45 (97.8%) states for acne vulgaris and 10 (33.3%) states for melasma and post-inflammatory hyperpigmentation. There was decreased Medicaid coverage of topical tretinoin for acne vulgaris compared to melasma and PIH ($P<0.05$).

Conclusion: There is differential Medicaid coverage for acne vulgaris compared to pigmentary disorders which disproportionately affect patients of color. Greater advocacy is required to ensure equal treatment for conditions that affect racial minority patients.

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INTRODUCTION

Melasma and post-inflammatory hyperpigmentation (PIH) are common conditions that predominantly affect patients with skin phototypes III-VI.[1,2] These pigmentary disorders are often considered cosmetic despite their significant psychosocial morbidity, including depression and decreased quality of life.[2]

Tretinoin is a first-line treatment agent for melasma and PIH.[3] Currently the FDA has approved tretinoin for the treatment of acne vulgaris, but not hyperpigmentation or melasma, despite acne's similar psychosocial morbidity profile.[3,4] In this investigation, we examine Medicaid coverage of tretinoin for acne vulgaris, melasma, and PIH in 50 US states and the District of Columbia (DC).

MATERIALS AND METHODS

Information regarding Medicaid coverage of generic or brand-name tretinoin products for acne vulgaris, melasma, and PIH was collected for 50 states and DC in February 2023 (Figure 1). Data was collected online from publicly available preferred drug lists (PDLs) and prior authorization (PA) criteria or via email and telephone inquiries with the respective state Medicaid offices. In states with multiple PDLs for separate Medicaid plans, one plan was selected to represent the state. Plans were selected as state representatives if they covered the largest number of patients (Hawaii) or were the most easily accessible plans via online search (Arizona, California, Delaware, Indiana, New Mexico). All data for this study was collected from publicly available sources and institutional review board approval was not required.

FIGURE 1. Methods flow chart.

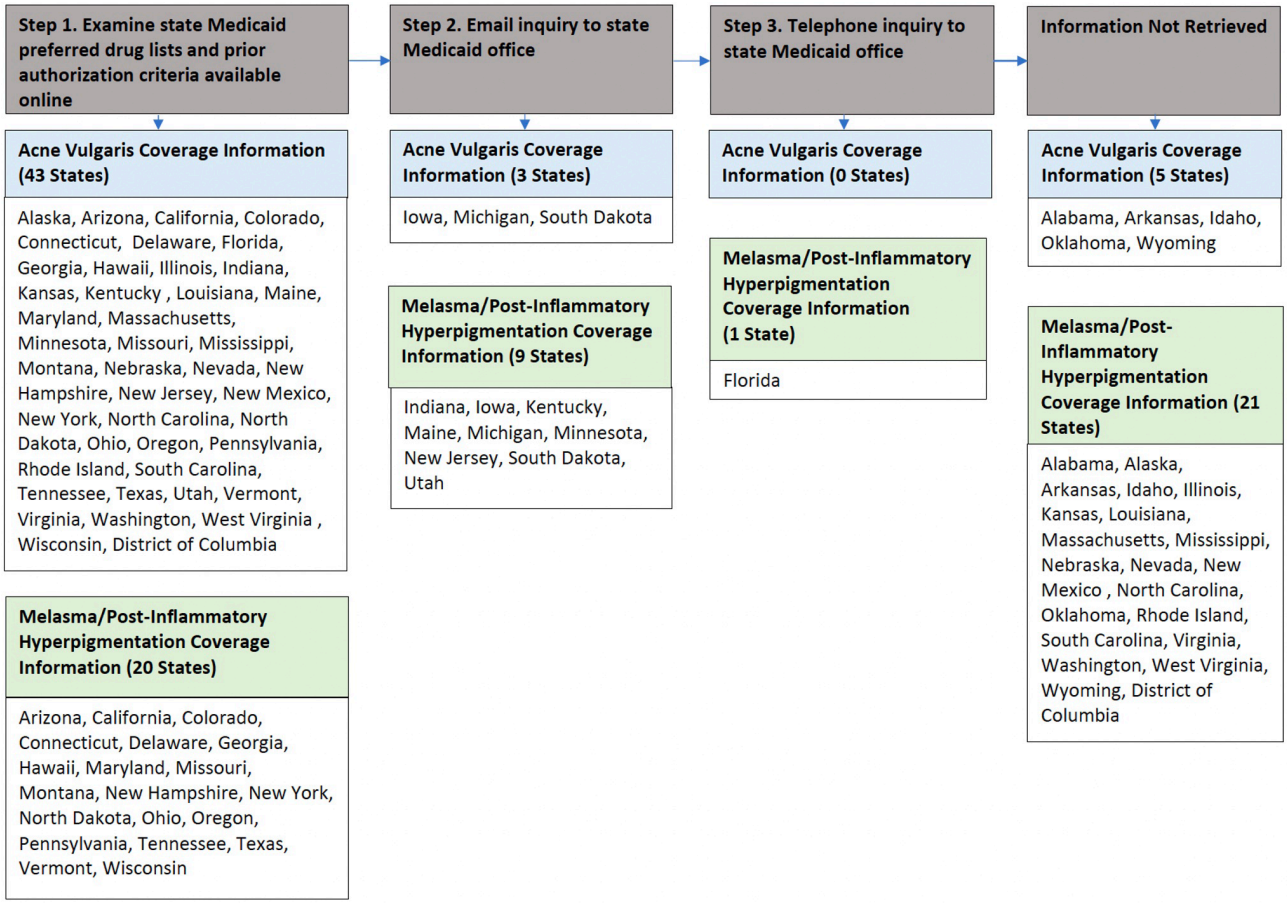
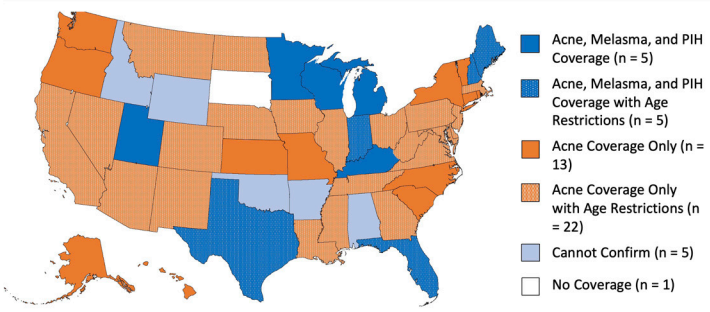


FIGURE 2. State Medicaid coverage of tretinoin by clinical indication.



RESULTS

Complete answers regarding tretinoin coverage for acne vulgaris, melasma, and PIH were obtained from 30 (58.8%) states, with an additional 16 (31.4%) states providing partial responses, and 5 (9.8%) states having no available information (Figure 1). Of the states reporting tretinoin coverage data, tretinoin is covered in 45 (97.8%) states for acne vulgaris and 20 (66.7%) states for melasma and PIH (Figure 2).

DISCUSSION

Our results demonstrate that most states cover topical tretinoin products for the treatment of acne vulgaris, but only a minority of states cover topical tretinoin products for the treatment of melasma and PIH. Within states that cover tretinoin for melasma and PIH, the clinical criteria for coverage target the epidemiology of acne vulgaris.[3] Age restrictions and PA criteria on tretinoin coverage typically range from adolescence to mid-twenties in most states with coverage, when acne is highly prevalent.[3]

This contrasts with melasma, which has an average age of first diagnosis of 30-38 years, with most patients seeking treatment an average of 3.50 years after its onset.[5] Coverage for melasma and PIH was only present in states that covered tretinoin regardless of clinical indication due to its inclusion on the respective PDL. Many states exclude coverage for cosmetic conditions except for acne. However, acne vulgaris and melasma/PIH have similar psychosocial morbidity profiles, highlighting the inconsistency in how conditions are classified as cosmetic versus medically necessary.[1,2] Our results demonstrate a lack of coverage for dermatologic conditions that disproportionately affect patients of color.

Limitations of this study include limited publicly available information on coverage criteria and the use of one Medicaid plan to represent each state. Future investigations should examine tretinoin coverage in all insurance policies.

DISCLOSURES

AM declares financial interest and a position on the advisory board of Figure 1 Beauty, Inc., Eli Lilly and Company, Pfizer Inc. and Hims. AM receives fees as a consultant from AbbVie, Concert Pharmaceuticals, Pfizer Inc. and 3Derm Systems. AM is the founder of Lucid, Inc. and receives research funding from Incyte Corporation, AclarisTherapeutics Inc., Eli Lilly and Company and Concert Pharmaceuticals. All other authors declare no conflict of interest.

REFERENCES

1. Handel AC, Miot LDB, Miot HA. Melasma: a clinical and epidemiological review. *An Bras Dermatol.* 2014;89(5):771-782. doi:10.1590/abd1806-4841.20143063
2. Kaufman BP, Aman T, Alexis AF. Postinflammatory Hyperpigmentation: Epidemiology, Clinical Presentation, Pathogenesis and Treatment. *Am J Clin Dermatol.* 2018;19(4):489-503. doi:10.1007/s40257-017-0333-6
3. Haas AA, Arndt KA. Selected therapeutic applications of topical tretinoin. *J Am Acad Dermatol.* 1986 Oct;15(4 Pt 2):870-7. doi: 10.1016/s0190-9622(86)70244-2. PMID: 3534024.
4. Yoham AL, Casadesus D. Tretinoin. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024. Available from: https://www.ncbi.nlm.nih.gov/books/NBK557478/. Accessed October 1, 2024.
5. Rathi S, Achar A. Melasma: A clinico-epidemiological study of 312 cases. *Indian J Dermatol.* 2011;56(4):380. doi:10.4103/0019-5154.84722

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