Biosimilar insulin glargine utilization in Medicaid: How interchangeability and other policy factors affect variation across states

Kaitlyn Hanson DO '26[1], Joshua Devine PhD[1], and Dooyoung Lim PhD[1]

[1]Des Moines University, Des Moines, IA

Background: In 2021, an insulin glargine biosimilar received an "interchangeable" designation, which, where allowed, enables pharmacists to automatically substitute these biosimilars when a reference product is prescribed. This project explored adoption of insulin glargine biosimilars across state Medicaid programs, all of which have unique characteristics.

Methods: Medicaid State Drug Utilization Data for all insulin glargine products between 2020-2022 were utilized to determine how biosimilar market shares varied according to state laws regarding pharmacist substitution, state Medicaid program structure, and utilization of preferred drug lists (PDLs). Kruskal-Wallis tests were used to compare the market shares of biosimilar insulin glargine across different groups of states based on their characteristics.

Results: Across state Medicaid programs, mean quarterly market shares for biosimilar insulin glargine was 28.7% (SD = 36.2%, range = 0% - 95%) in 2020, 25.9% (SD = 35.8%, range = 0% - 95%) in 2021, and 28.1% (SD = 36.9%, range = 0% - 95%) in 2022. Use of interchangeable insulin glargine was higher among states that lacked regulatory authority to automatically substitute for interchangeable biosimilars; 13% vs. 8.8%; $p < 0.01$). Market shares of interchangeable insulin glargine were also highest among state Medicaid programs with MCOs that were not subject to statewide PDLs for insulin glargine (18.9%)

Conclusions: Biosimilar usage increased following introduction of an interchangeable product, but also varied considerably among state Medicaid programs. Many factors among state Medicaid programs may contribute to underutilization of biosimilars, and revisiting these factors at the state level may improve access for patients.