### AAC Board Meeting – 21 June 2023

## **Supplementary Information**

Agenda Item 4: Addressing health inequalities through the NHS Core20PLUS5 approach: AAC Progress and future plans.

# Are Minority Children the Last to Benefit from a New Technology?

# Technology Diffusion and Inhaled Corticosteriods for Asthma

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## **Abstract**

#### **Background:**

Racial and ethnic disparities in health and health care have been well documented, but few studies have addressed how disparities may change over time.

### **Objective:**

We sought to determine the change in relative rates over time of corticosteroid metered dose inhaler (MDI) use in minority and nonminority populations with asthma.

## **Design and Setting:**

We used a cross-sectional survey for 5 periods of 2 years' each (1989–1990, 1991–1992, 1993–1994, 1995–1996, 1997–1998) using the National Ambulatory Medical Care Surveys (NAMCS).

## **Participants:**

A total of 3671 visits by adults and children with asthma to U.S. office-based physicians comprised our sample.

#### **Main Outcome Measure:**

We sought to measure differences in inhaled corticosteroid use for minority and nonminority adults and children controlling for gender, specialty, U.S. region, and type of insurance.

#### **Results:**

Minority patients with asthma were less than half as likely as nonminority patients to have had a steroid MDI prescribed during 1989–1990. By 1995–1996, minority and nonminority patients with asthma were equally likely to have had a steroid MDI prescribed. Although differences between black and white patients resolved, differences between white and Hispanic patients persisted even after adjusting for insurance. Children initially were less likely than adults with asthma to have steroid MDI prescribed, and this difference persisted. Minority children had the greatest delay in adoption of steroid MDIs.

#### **Conclusion:**

Steroid MDIs diffused into minority and nonminority adult and child populations at different rates.