

**Poster Topical Area:** Nutritional Epidemiology

**Location:** Hall D

**Poster Board Number:** 811

## **P20-148 - Healthcare Costs and Savings Associated with Increased Adherence to Healthy Dietary Patterns Among Adults in the United States**



Sunday, Jun 10 8:00 AM – 6:00 PM

**Objective:** To estimate the impact on healthcare costs associated with increased adherence to healthy eating patterns among US adults.

**Methods:** Recent moderate- to high-quality meta-analyses of health outcomes associated with increased adherence to diets measured by the Healthy Eating Index (HEI) or the Mediterranean-style diet (MED) scores were identified. The 2013-14 What We Eat in America (WWEIA) data provided estimates of adherence to HEI-2015 and MED. Risk estimates quantifying the association between dietary patterns and health outcomes were combined with the dietary pattern score increase under two adherence scenarios: 1) increasing average HEI and MED scores by 20% and 2) increasing HEI and MED scores to achieve 80% of the maximum score. The resulting change in risk was combined with published data on annual healthcare and indirect costs, inflated to 2017 US dollars, to estimate cost. To address double counting, costs were adjusted to minimize potential overlap of co-morbidities.

**Results:** Overall modelled cost savings were \$25.7B (range of \$11.6B to \$37.8B) to \$38.1B (range of \$29.7B to \$46.8B) based on a 20% increase in the MED and HEI-2015, respectively, resulting from reductions in cardiovascular disease (CVD), cancer, type 2 diabetes mellitus for both patterns and including Alzheimer's disease and hip fractures for the MED. If diet quality of US adults were to improve to achieve 80% of the maximum HEI-2015 and MED score, cost savings were estimated at \$66.9B (range of \$51.9B to \$81.9B) to \$135B (range of \$61.5B to \$200B), respectively.

**Conclusions:** This is the first comprehensive study quantifying health care savings from health outcomes associated with two dietary patterns recommended as part of the 2015 Dietary Guidelines for Americans. Findings from this study suggest that increasing adherence to the healthy dietary patterns among U.S. adults could reduce costs, with billions of dollars in potential savings.

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