Understanding the role of sport participation in health represents an important research agenda in sport management. Scholars have called for more interdisciplinary research to legitimate sport scholarship and investigate how sport could contribute to a broader conversation related to promoting population health (Chalip, 2006; Inoue, Berg, & Chelladurai, 2015). One public health issue that sport may offer an effective solution to is the rise of healthcare costs among older adults (Amadeo, 2018). This issue will likely intensify in the coming decades in the United States, as the number of people aged 65 years and above is projected to reach 98 million in 2060, accounting for 24% of the U.S. population (Mather, Jacobsenm, & Pollard, 2015).

Research has identified that leisure-time physical activity can play an integral role in lowering healthcare costs; however, the studies on the costs of physical inactivity have been limited by individual-level research designs. Given that the effects of physical activity on healthcare costs can be influenced by economic, sociocultural, and other community-level environmental factors, it is critical that any empirical examination of such effects consider environmental differences among communities using a macro-level analysis. Moreover, little research has examined whether leisure-time physical activity contributes to lowering healthcare costs among older adults, a critical public health issue in the United States. Using data from the 50 states and the District of Columbia, the purpose of this study was to investigate the extent to which participation in leisure-time physical activity is related to healthcare costs among older adults.

We obtained twelve-year state-level data (2003-2014) from six secondary sources (N = 612). Healthcare costs represented the average Medicare reimbursements per enrollee in each state. The physical activity rate represented the percentage of adults aged 65 and over who had participated in leisure-time physical activities during the 30 days prior to the survey. To capture potential lagged effects, we included three lagged variables (physical activity rate at time t – 1, t – 2, and t – 3) in our analysis. The analysis also included 12 state-level control variables (e.g., smoking rate, poverty rate).

We used the fixed-effect model to analyze the relationship between the physical activity rate and healthcare costs. The results suggest that the physical activity rate was not associated with healthcare costs in the current year; however, both the 2-year lagged variable (B = -.08, p = .02) and the 3-year lagged variable (B = -.09, p = .02) for the physical activity rate were negatively associated with healthcare costs, confirming the time-lagged effects of physical activity. The estimates from the model indicate that 10% increase in the physical activity rate in each state could reduce healthcare costs by 0.7% after 2 years and 1.3% after 3 years. Our findings provide new evidence of the macro-level effect of physical activity on healthcare costs among older adults and, thereby, extends prior research that supports the relationship between leisure-time physical activity and healthcare costs. The results also offer valuable insight into local governments and communities to guide their policy-making on public investment in physical activity intervention programs for older adults.