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HSR-24 The Health Benefits of Improvements to the Physical Environment

(HSR) Health Services and Policy Research—Health Economics and Cost Analyses

Alberto Longo, PhD, Mary Lynch, MSc, and W. George Hutchinson, Professor, Queen's University Belfast, Belfast, United Kingdom

Purpose: To assess the willingness to pay for improving neighborhood characteristics to stimulate society to reach the recommended amount of 30 minutes of physical activity 5 days a week.

Methods: Using stratified sampling, 226 interviews of individuals aged 18+ living in Northern Ireland, United Kingdom, were collected by Action Cancer, a registered charity, during January to May 2010. We use stated preferences to elicit the amount of physical activity that respondents are willing to do on a weekly basis under (i) current and (ii) improved physical environment characteristics of the area where they live. We then use a payment ladder Contingent Valuation question to assess how much respondents are willing to pay—as a one-off tax—for the improvements to the physical environment of their neighborhood. We use an interval data accelerated-life Weibull model to explain respondent's willingness to pay for improvements in the physical environment with respondents' socio-economic characteristics and with the level of physical activity that respondents expect to do under current and improved characteristics of the physical environment.

Results: We find that, on average, respondents are willing to pay 50.81 GBP (SE 5.46) to improve the characteristics of the physical environment where they live in. When we focus on respondents that do not currently do any physical activity but that under improved characteristics of the physical environment are willing to do the recommended 30 minutes of physical activity 5 days a week, their willingness to pay for the improvements in the characteristics of the physical environment is 55.33 GBP (SE 8.33). The public values, on average, 6.25 GBP (SE 3.05) the health benefits derived by meeting the recommended amount of physical activity when these are stimulated by improvements in the physical environment.

Conclusions: Research based on stated preferences shows that interventions aimed at improving the characteristics of the physical environment leading to increased physical activity are supported by the public. Policymakers should be aware that the benefits in terms of increased levels of physical activity that the public perceives from improvements in the physical environment are quite substantial.