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Mapping the mobility of older adults in an urban context using GPS mobility data with the purpose of contributing to housing decisions in Canada

With the rise of population of older adults, tools to aid them into housing decisions are available, however, their mobility patterns and social-well remain relatively unknown. Our research's goal is to understand further that unknown and use it as a tool for informing housing decisions. The objective is to strengthen social health and well-being in urban settings by the promotion of shared decision-making for housing decisions. The goal is to enhance social health and well-being in urban settings, promoting shared decision-making for housing choices. This study is part of the broader COORDINATES project, an international interdisciplinary research collaboration between the Netherlands, Sweden, and Canada. Participants: The recruitment process involved community engagement and distributing informational flyers. Eligible participants included individuals who met the following criteria: i) aged 65 years or older, ii) living independently at home, either with a partner, a family member, or alone. Data collection: The data collection for the mapping was done with a GPS device for participants which they used over a 14-day period. Other data part of the broader study such as sociodemographic, health, and quality of life surveys were conducted. Walking interview and a daily journal were also part of the data for the study. Data analysis: GPS data analysis was conducted using QGIS. Data regarding activity space and mobility choices were extracted. Results: We collected qualitative data from 14 participants, 8 from Alberta and 6 from Quebec. However there are only 9 participants (5 from Québec, 4 from Alberta) that were able to properly use the GPS. As a result, 9 maps are created to visualise the activity space of the participants. Mobility choices such as car, bus or walking are identified as modes of transport while each of their trip is documented to show their activity space. Findings showed that the urban participants would choose the bus over the suburban participants. The opposite trend is highlighted with the car which is used and with longer distances by suburban participants. A participant would also walk more in an urban area than a suburban one. [Funding: Joint Programming Initiative More Years Better Lives (JPI MYBL)].