

Improving access to healthcare in marginalized communities through smart connected technologies

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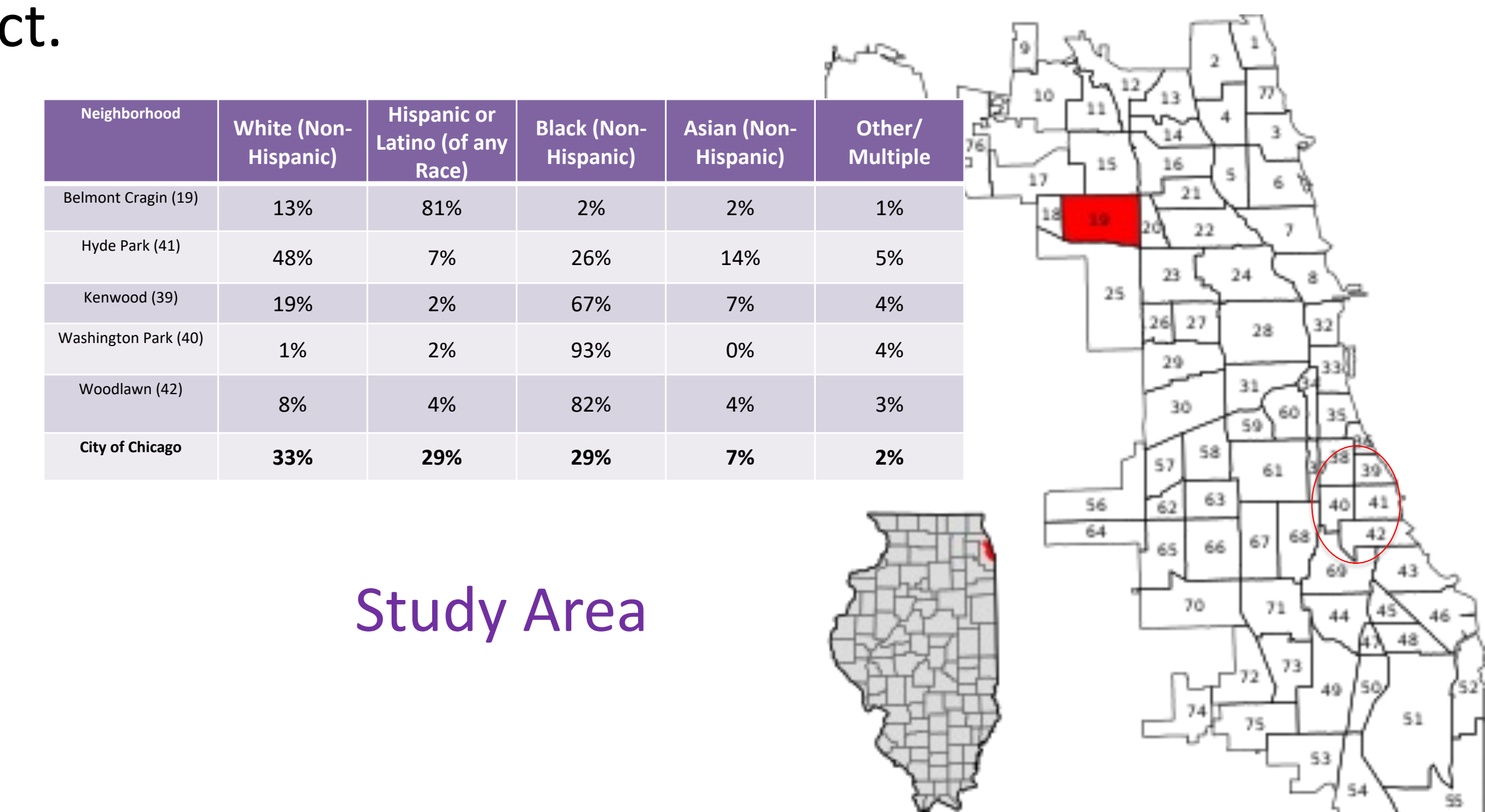
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Our vision is to create community-centered solutions that deliver better healthcare to and encourage health-promotion behavioral changes among seniors from marginalized communities, by strengthening access to health care, services, and resources.

Transportation is a well-known barrier for many to access opportunities critical to their life outcomes, such as employment, education, and healthcare. **Vulnerable populations in marginalized communities – low-income residents, minorities, and seniors – are disproportionately burdened by the lack of accessibility to healthcare.**

The project lays the foundation for new socio-behavioral theory that explores the complex relationship between healthcare accessibility and broad health-related behaviors. It deepens our understanding of (i) the barrier to healthcare access among seniors from marginalized communities, and (ii) institutional and technological challenges in integrating conventional and emerging mobility services from both private and public sectors. The project also initiates the development of analytical and computational tools that form the core intelligence of a **Smart Health Assistance and Resource Portal (SHARP)**.

- We selected five communities located on the West and South sides of Chicago as the study area of the project. We also designed protocols and questions for semi-structured interviews that have received IRB approval.
- We organized two virtual expert panel sessions (January and May of 2022) to map out the connections between health, access to transportation, and digital technology. The participants represent public transportation agencies, medical professionals, health logistics providers, advocacy groups and community.
- We organized an in-person community listening session in Belmont Cragin (June 2022) to hear directly from community members on qualitative experiences of (barriers to) health access.
- We acquired location intelligence data from Predicio and began to mine the data for healthcare access information in the study area since June 2022.
- We studied transit design methods that place accessibility and equity at the center of tradeoff.



Study Area

The results from this project will accumulate knowledge about the existing healthcare barriers faced by seniors from marginalized communities in the West and South sides of Chicago, reveal their health-related preferences and choice behaviors, and prescribe potential solutions to strengthening their physical and virtual access to health care, services, and resources.

If succeeded, the seniors who participate in this study will see tangible health benefits gained from better access to and engagement with healthcare systems. Improving the health of seniors contributes to the overall wellbeing of the society and helps lower healthcare costs. In the long run, the tool developed in this project can be deployed in other underserved communities to help build a healthier and more equitable society.

As next steps, the team will

- Organize another in-person community listening session in Washington Park area;
- Conduct an on-line survey designed to complement the findings from the interviews;
- Analyze data collected from interviews/surveys, as well acquired from commercial vendors; and
- Prepare a proposal for S&CC IR Grant.