

SCC-PG: Building capacity for data-driven physical activity interventions in communities with depression and obesity hotspots

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Problem

- Depression and obesity are widespread
- Physical activity reduces BMI & depression symptoms, but only 23% of US adults meet federal guidelines
- Community-tailored exercise interventions have the potential to promote physical activity

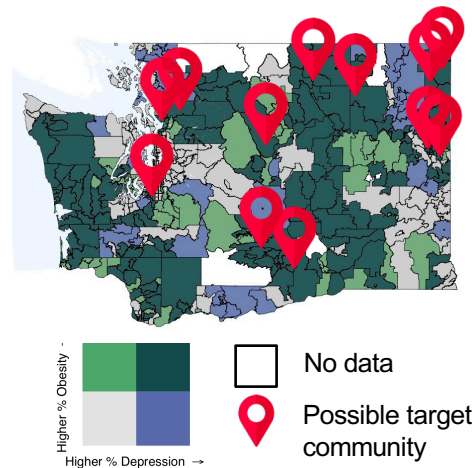
Research questions

1. Which geographic communities experience a high prevalence of obesity and depression (“hotspots”)?
2. What are the needs, barriers, and opportunities for tailored physical activity interventions among hotspot communities?

Planned activities

Aim 1. Geospatial analysis of health data to identify “hotspots” enriched for obesity & depression

Aim 2. Engage hotspot communities to inform the design of tailored physical activity interventions



Expected Outcome

Identify feasible interventions for hotspot communities and human factors to consider

What we have learned

- Preliminary geospatial analysis shows more hotspots in rural than urban areas
- Some potential hotspots (e.g., Native American Tribal Nations) could take years to engage
- Partnering with community clinics gives us champions to facilitate engagement

Intellectual Merit

- Use of multiple health data sources to identify true community hotspots
- Community-tailored interventions to overcome barriers & leverage opportunities in one’s routine activities and their surroundings

Broader Impacts

- Short term, we directly engage hotspot communities with interventions for reducing obesity and depression
- Longer term, communities similar to those hotspots could benefit from the interventions to promote physical activity