**eCPAT: Using mobile technology to assess the acceptability, feasibility, and efficacy of the Community Park Audit Tool with youth**

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**Study Background**

The dramatic increase in obesity rates in recent years has generated a focus on creating healthier communities through policy, systems, and environmental (PSE) changes. Parks, in particular, are key venues to promote population-level physical activity and other positive health outcomes. Creating healthy communities, including better parks, will require the interest and participation of multiple constituencies. Engaging youth in this process is a promising strategy to advance PSE change efforts while creating future health advocacy leaders. Substantial research has shown that youth are frequently the early adopters of new technologies and that such technologies provide a more interactive and hands-on way for youth to engage with their local communities. Therefore, to further advance this area of practice and research, developing and testing the viability of technology-based methods for measuring physical activity environments among youth is an important step.

The Community Park Audit Tool (CPAT) is a user-friendly instrument that enables community members to quickly and reliably audit community parks for their potential to promote physical activity. It was developed through a grant from the Robert Wood Johnson Foundation (by Dr. Kaczynski, Dr. Wilhelm Stanis, and Ms. Besenyi) and a process involving diverse adult stakeholders in three workshops and field testing in over 60 parks. The CPAT contains four sections that capture key elements of park environments: park information, access and surrounding neighborhood, park activity areas, and park quality and safety. It has demonstrated strong content validity and inter-rater reliability, but to date has been primarily tested and used only among adults. The present project will develop an electronic version of the CPAT (eCPAT) and test its acceptability, feasibility, and efficacy among youth.

**Purpose**

This study will develop and test the viability of technology-based methods for measuring physical activity environments and increasing youth engagement in community PSE change efforts.





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**Specific Aims**

1. To develop an electronic version of the Community Park Audit Toolfor use by youth and the general public on portable electronic devices.
2. To examine the reliability, validity, and engagement of youth auditing parks using electronic vs. paper-and-pencil methods.

**Study Setting**

* Parks (combination of city and county) in Greenville County, SC - diverse mix of quality, size, features, and geographic dispersion

**Study Participants**

* Youth ages 12-18 years from Greenville County, SC (approximately 20 youth will participate in beta testing of the eCPAT app as part of the eCPAT development process, while a larger number will engage in testing the eCPAT app in Greenville area parks).

**Study Stages**

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| **Study Stages (2013-14)** | **Specific Aim 1** | | | | | | **Specific Aim 2** | | | | | |
| **July** | **Aug** | **Sept** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **June** |
| Review of literature |  |  |  |  |  |  |  |  |  |  |  |  |
| Key informant interviews |  |  |  |  |  |  |  |  |  |  |  |  |
| Development of eCPAT |  |  |  |  |  |  |  |  |  |  |  |  |
| Testing of eCPAT with youth |  |  |  |  |  |  |  |  |  |  |  |  |
| Evaluation of youth experience |  |  |  |  |  |  |  |  |  |  |  |  |

1. **Review of Literature:** We will conduct a systematic literature review on issues related to technology, youth, and health advocacy to better understand how technology can engage youth in health research and policy actions.
2. **Key Informant Interviews:** We will conductinterviews with 4-5 key informants (e.g., academic and community leaders familiar with youth engagement, developing electronic tools) to assist in understanding key elements to include in the development of an electronic version of the CPAT.
3. **Development of eCPAT:** The study team will develop an app version of the CPAT (eCPAT) for use on portable electronic devices (i.e., tablets, smartphones) using an Android platform. As part of the development process, 20 youth (variety of genders, ages, and race/ethnicities) will be recruited to participate in beta testing of the initial version of the eCPAT app to revise/refine eCPAT towards youth functional preferences and ease of use.
4. **Testing of eCPAT with Youth:** Intervention youth will complete two park audits each (2 paper, 2 electronic, or 1 of each) on a total of 50 parks. The data collected will be used to examine validity, inter-rater reliability, and feasibility of the CPAT and eCPAT tools.
5. **Evaluation of Youth Experience:** We will conduct follow-up focus groups and brief surveys to understand the youths’ acceptability and efficacy for conducting park audits and for using the new eCPAT app.

**Study Funding Source**

South Carolina Clinical and Translational Research Institute