

## **PREVENTION OF HIP DISLOCATION IN CHILDREN WITH CEREBRAL PALSY**

### **A Smartphone App for Community-based Hip Surveillance**

C Hip surveillance for children with cerebral palsy can significantly decrease the morbidity of hip displacement and maintain hip function. While hip surveillance programs have been effective in countries with centralized medical systems, application of hip surveillance guidelines to medical systems with less organization may require a more novel community-based approach. We have developed and preliminarily validated a free app called “HipScreen” ([www.hipscreen.org](http://www.hipscreen.org)) that contains information on hip surveillance adapted from the Australian Hip Surveillance Guidelines for Children with Cerebral Palsy 2014, protocols for proper radiograph acquisition, and a tool for measuring radiographs directly from the device screen.

#### **PROJECT BACKGROUND**

We aim to establish the validity of the app-based measurement of radiographs in users with experience in radiographic interpretation, and to demonstrate the effectiveness of a free online video-based tutorial to teach users without experience in radiographic interpretation to accurately interpret hip surveillance radiographs using the HipScreen app. With nearly 70% of the global population having access to a smartphone by 2020, a validated app for hip surveillance would allow hip surveillance to have global impact.



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**FUNDING REQUIRED**

\$240,500 over 2 years