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## Developing “care assistant”: A smartphone application to support caregivers of children with acute lymphoblastic leukemia

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Acute lymphoblastic leukemia (ALL) is the most common childhood malignancy. Family caregivers, especially parents, play an important role in delivering complex health care services. Caring for children with ALL is an uncommon experience for parents without medical training. They urgently need professional assistance when their children are recovering at home. The objective is to document the process of developing an Android application (app) “Care Assistant” for family caregivers of children with ALL. Key informant interviews and focus group studies were used before programming the app. The key informants and focus group members include: Caregivers of children with ALL, cancer care physicians and nurses and software engineers. Study participants highly appreciated the idea of developing an app to assist caregivers. We found several major challenges faced by caregivers: Limited access to evidence-based clinic information, lack of financial and social assistance, deficient communications with doctors or nurses, lack of disease-related knowledge and inconvenience of tracking treatments and testing results. These feedbacks were used to develop “Care Assistant”. This app has eight modules: Personal information, treatment tracking, family care, financial and social assistance, knowledge center, self-assessment questionnaires, interactive platform and reminders. A web-based administration portal to manage the app was also developed. Engaging parents of children with ALL and cancer care physicians and nurses is critical in developing an app for family caregivers, which improves relevance and appeal of the app to target users. The usability and effectiveness of “Care Assistant” is being evaluated in our ongoing studies.

### Biography

Jingting Wang is currently a PhD Student in School of Nursing, Second Military Medical University, China. Currently, she is an International Visiting Student in Lawrence S. Bloomberg Faculty of Nursing, University of Toronto supported by China Scholarship Council. Her research focuses on the combination of family-centered care for pediatric cancer with the technology of mhealth. She got outstanding Graduate Candidate Fund of Second Military Medical University with her research “Feasibility and effectiveness evaluation of a smartphone application ‘Care Assistant’ in supporting caregivers of children with acute lymphoblastic leukemia”. She has also published several papers in both English and Chinese.

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