

CONFERENCE ABSTRACT

Seeking to Understand the Patient Experience & Co-Design a Self-Management App

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Introduction: An increasing number of patients with multiple chronic conditions are accessing the Emergency Department (ED) to meet care needs best managed in a primary care setting.

Aim and Theory: The goal of this research was to understand and appreciate, in the patients' own words, why they felt they needed to seek healthcare in the ED. Through an understanding of the patient's perspective, tools to assist patients with individualized self-care guidance could be developed to meet their care needs in the most appropriate place.

Short Description: Using a qualitative interview methodology 20 patients participated in interviews in the ED and their perspectives leading up to their ED visit were explored. The knowledge gained through these interviews was used to develop an App that could be customized to the patient's unique clinical requirements with the goal of increasing self-efficacy and provider knowledge of how the patient was managing their care. One patient volunteered to participate in an observed interprofessional team interview in which his experience with his chronic condition self-management was further explored by the team using appreciative inquiry. The App was subsequently co-designed with this 'beta' patient utilizing the expertise and skills of Human Factors Lab at University Health Network in Toronto.

This work resulted in the prototype of "MyTeamApp"—a patient directed, provider informed Health Alert Guide to Care. The App provides the patient with immediate feedback from an individualized care plan and collects data to inform the patient's circle of care.

Targeted Population: Patients with multiple chronic conditions with 4 or more ED visits in six months.

Timeline: 10 months

Highlights: The impact of the project was monitored by measuring the health system utilization of the 'beta' patient prior to the App development and once the prototype was 'live'. His ED visits dropped significantly and his diabetic control improved. In addition, knowledge gained from the qualitative interviews was shared with local groups of health care providers to inform the current dialogue regarding health system utilization patterns of patients with complex health and social presentations. The response to the frequent ED visit patient notification system was modified and enhanced as new

knowledge emerged regarding how to engage patients, primary care and other providers in coordinated care planning activities.

Sustainability & Transferability: The App was specifically designed to allow tailoring to any individual patient needs. This requires individual patient engagement with their care teams to understand self-care needs which should be part of patient-centred care.

Conclusions: A user-centered design App that engages the patient in managing their care needs in a meaningful way and provides feedback to keep them engaged in making improvements in self-management had a positive impact on our "beta" test patient's self-management of his chronic conditions and a reduction in his ED visits. The end result for providers is the ability to produce a series of the patient's tailored health data that will improve understanding of an individual's care/support needs as well as support better care across the continuum.

Discussion: Further development and testing of the App is planned.

Keywords: chronic diseases; self-mangement; toolkit; patient education
