

TECHNOLOGY BRIEF

ePROM

Voxe: An Innovative Electronic Patient-Reported Outcome Measure (ePROM) Platform

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Background

As the structure of health services shifts towards more patient-centered care, the importance of patient-reported outcome measures (PROMs) is increasingly recognized, and endeavors are being made to introduce PROMs into routine clinical practice. PROMs are important in addressing burden of disease and are defined as: 'any report of the patient's health condition that comes directly from the patient, without interpretation of the patient's response by a clinician or anyone else'. PROMs can capture a patient's self-assessment of functional status, symptoms, treatment adherence and multiple domains of well-being and quality of life.

In doing so, PROMs give patients a voice in their healthcare and provide an opportunity for meaningful engagement. Research indicates that the systematic collection of PROM data enhances patient-clinician communication and shared decision-making, thereby improving health outcomes.

Description of the Invention

Voxe is an innovative electronic PROM (ePROM) platform created in response to both healthcare provider (HCP) and patient need. HCPs highlighted the need for a platform that would be able to save time in clinic with the goal of providing better patient care. Patients emphasized the need for a platform that enables them to share their voice, making them feel more empowered. As such, after a lot of research and extensive consultation within the healthcare community and not finding a platform that met the specific needs within paediatrics, the decision was made to create an ePROM platform – which was named Voxe.

The overarching objective of this platform is to improve health outcomes and transform the delivery of care for paediatric patients by integrating ePROMs into standard clinical practice. A phased approach was used to target methodological and practical decisions needed to guide systematic and effective implementation of ePROMs into 'real-world' paediatric patient care settings. A user-centred approach, in which end-users (i.e., patients and HCPs) are central to the design process and usability testing, guided Voxe platform creation.

Commercial Applications

Voxe was built to be able to accommodate any ePROM and thus is applicable to any disease population. Due to the bespoke nature of the platform, the Voxe development team can ensure that HCP preferences regarding grouping of results or display of score severity, for example, are included in the final platform.

It leverages eHealth technology as an innovative approach to capture the voices of children in clinical practice and understand their perspective of their illness experience.

This platform will facilitate ePROM data collection in a child friendly and patient-centred manner. For HCPs, Voxe will facilitate convenient and timely review of patient ePROM data, collaboration within healthcare teams and shared decision-making discussions between HCPs and patients during clinical encounters. Notably, Voxe has been successfully integrated with Epic, an electronic medical record (EMR) system, with bi-directional flow of data. It has the capability to integrate with other EMRs as well (e.g., Oracle Health, formerly Cerner).

Developmental Stage

Voxe has completed iterative rounds of co-design and usability testing. It is currently being used at SickKids and will be piloted at the Children's Hospital of Eastern Ontario.

Recent journal [publication](#).

Keywords: ePROM, patient-centred care