kHealth Digital Personalized Healthcare technology for Pediatric Asthma

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Objective

kHealth kit

A knowledge enabled analytical framework of Augmented Personalized Healthcare (APH) approach for continuous monitoring of chronic disease, its progression, and the patient’s health.

kHealth Dash

A Platform to Visually Analyse to find Correlations (e.g., Patient Symptoms and Personalized Data)

Continuous: Patient Centric Healthcare involving Patient Generated Health Data (PGHD)

- In the ongoing trial involving pediatric asthma patients, we have consented 90 patients out of 150 study cohort.
- The kHealth kit collects 1862 data points patient/day on 29 different parameters.
- The study has over 75% patient compliance.

kHealth Kit for Pediatric Asthma involving multi-sensors collecting personalized multimodal data streams (Clinical notes, mHealth application, PGHD and Outdoor environmental observations)

Questions to be answered

- Can we reduce the number of asthma attacks through continuous monitoring of the patient’s health condition?
- Can we predict the asthma attack based on the data collected from the patient?
- Can we predict the asthma vulnerability score for a patient?
- Can we predict the asthma severity level of a patient?
- Can we understand the causal relationship between the asthma symptom and possible factors responsible for it?

Multimodal Data Streams & Anonymised Patient Data Visualized for Correlation Analysis interpreted in with the help of knowledge graph (relevant medical knowledge)

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