Transforming Emergency Care Visits: CHLA's MyVisit Integration

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Executive Summary

Children's Hospital Los Angeles (CHLA) is a leading non-profit pediatric healthcare provider dedicated to delivering comprehensive and compassionate care to children. Located in the heart of Los Angeles, CHLA serves a diverse population, providing specialized services across various medical disciplines. Children's Hospital Los Angeles (CHLA) has partnered with technology startup, Vital.io, to launch MyVisit, an innovative web-based application designed to enhance the Emergency Department (ED) experience for patients and their families. Launched in February 2024, MyVisit empowers families by providing real-time access to visit details directly from their smartphones, from check-in to discharge. This initiative aims to alleviate stress, improve transparency, and support ED teams by delivering timely and essential information, ultimately enhancing patient engagement and satisfaction.

Overview

Background

Emergency Department operations are inherently challenging and demanding, often leading to patient dissatisfaction and increased stress for both patients and staff. Recognizing these challenges, CHLA has implemented MyVisit to provide the right information at the right time, ensuring that patients and their families are well-informed throughout their ED visit.

MyVisit leverages technology and real-time data to address common issues such as long wait times and lack of communication. Through automated text messages, the application offers wait time estimates, updates on visit progress, ability to submit a service request, and order statuses, facilitating smoother ED visits. Additionally, MyVisit enables patients to share their visit status with family members, reducing anxiety and enhancing family involvement, even for those not physically present in the ED. This integration not only improves patient experiences but also optimizes ED operations by reducing staff workload associated with patient inquiries and dissatisfaction.

The primary business objective of MyVisit is to enhance patient experiences and streamline ED operations. By providing accurate, up-to-date insights into patients' experiences, MyVisit fosters effective communication among patients, their families, and ED staff, resulting in a more efficient and satisfactory ED environment.

Product Workflow

Upon registration, the screening nurse records the chief complaint and verifies the patient's cell phone number. Once the phone number is confirmed by the patient and entered into the EHR, MyVisit promptly sends an automated welcome text message to their designated cell phone number. This message includes a unique link for logging in. No downloads, usernames, or passwords are necessary for accessing MyVisit; patients simply enter their last name and date of birth to begin using the platform. Once the patient enters the necessary information (last name, DOB), MyVisit will launch in their smartphone's web browser.

Once in MyVisit, patients can view wait time broken down into steps, submit a service request (e.g., request for water or blanket), and even share the visit link with a loved one who is not present. Additionally, our ED patient liaison frequency rounds on patients to not only promote MyVisit but to guide patients through log in, usage, and understanding MyVisit.

After the visit is complete, patients will receive a short after visit summary along with the opportunity to sign up for MyChildrensLA (patient portal) and to submit their MyVisit satisfaction survey. The patient will have access to view MyVisit up to 14 days after their visit is complete.

Research *Pending Final Results and Findings*

Objective

Visiting the pediatric emergency department (ED) can be a uniquely stressful event for patients and their families. Digital apps can improve communication and provide expectations about patients' steps in their ED visit. With the implementation of any new technology, there is a risk of inequitable uptake by sociodemographic groups. We are completing a retrospective study of the new patient-facing digital experience, MyVisit, in the CHLA Emergency Department to understand (1) clinical outcomes related to use of the experience and (2) equitable adoption by sociodemographic factors.

Aim 1: Describe patient-reported acceptability of MyVisit in the CHLA Emergency Department
We will describe uptake of MyVisit, including basic demographics and clinical characteristics of patients using the experience and measures of reach and usage. We will describe overall acceptability and strengths and weaknesses of the experience as identified by families in the in-app survey.

Aim 2: Clinical outcomes related to adoption of MyVisit.
In order to meet this aim, we will assess the association between adoption of MyVisit as defined by usage, number of minutes spent in MyVisit, and the following clinical related outcomes:

- Patient satisfaction with ED visit
- Patient understanding of wait time
- Rate of left prior to being seen

Aim 3: Equitable Adoption of MyVisit by sociodemographic factors.
In order to meet this aim, we will assess the association between the following sociodemographic factors and likelihood of adoption of MyVisit:

- Patient race/ethnicity
- Preferred language
- Insurance type
- Child opportunity index

We will secondarily assess the effect of an in-person patient navigator on equitable adoption by comparing

adoption by patients who present to the ED during hours when a patient navigator who is fluent in both English and Spanish is present (9 AM to 5 PM Monday through Friday) compared to those who present outside of patient navigator hours.

Preliminary Findings

Preliminary analysis found that in the first five months of the MyVisit app, 32,031 patients and their families were reached, and 25,015 (78.1%) used the MyVisit app. We found statistically significant differences in use of MyVisit by race/ethnicity, language, insurance, and acuity level. Briefly, patients who were Non-Hispanic White, English-speaking, had private insurance, and had lower acuity (ESI level 3-5) were more likely to use MyVisit. However, these differences were clinically small. Preferred language had the strongest association with app use, with 73.5% of Spanish-speakers, 80.5% of English-speakers, and 70.3% of other-language speakers using the app. Of 549 patients who completed the MyVisit experience survey, the median satisfaction score was 5/5 stars.

Next steps in this research include analyzing the association between use of MyVisit and clinical outcomes such as likelihood of leaving prior to being evaluated by a physician and overall ED patient satisfaction.

Patient Feedback

To gather patient and family feedback and ensure patient-family satisfaction, all ED patients receive a Patient Experience Survey after their visit is completed. Open-ended patient feedback received regarding **concerns about wait times has decreased by 23%** since the introduction of MyVisit.

We are delighted to share some of the positive patient feedback comments we have received, highlighting our commitment to delivering compassionate and high-quality care through innovative solutions.

"All of the staff were incredibly helpful. I also loved the fact that I could track my wait time and everything online. And then, I didn't really have much wait time, which I loved. But the team, from the moment I checked in with the nurses, to everyone that did the x-rays, the ultrasound, and even check out, it was all very smooth."
Visit date: 03/16/24

"I did enjoy the fact that the emergency room had a text messaging system that let me know exactly how long I

had to wait and also gave me extra copies of my paperwork in case I lost them. And everybody was friendly and all of good of how they responded to my chat."
Visit date: 05/08/24

Conclusion

Product Roadmap (Future Plans)

While we are pleased with the successful launch, we are even more excited about the future work. With phase 1 of MyVisit complete, we look forward to our next phase. Our next steps include utilizing all the data and feedback collected to drive the direction of the product. We will re-evaluate the product to ensure it aligns with the core issues and inefficiencies we aim to address and adjust as needed. By aligning on the product vision, we hope to deliver even greater value to our users and our CHLA Emergency Department staff.

Enhancing Existing Features

We are updating the wait time algorithm to be even more accurate for pediatric emergency departments. Additionally, we will use MyVisit text messages to inform patients about the availability of our Virtual Urgent Care service.

Enabling New Features

We are introducing several new features within MyVisit, including lab and imaging order results, language translations for clinical content, and discharge summaries that utilize AI to identify key clinical terms to provide education resources and videos. Additionally, we will provide a link to a wayfinding tool and offer video education resources at discharge.

Product Research

Dr. Anna Cushing is enthusiastically working to finalize her research by November. This work is being submitted as an abstract to the Pediatric Academic Societies (PAS) in November in anticipation of being accepted for presentation at the conference in Spring 2025. Dr. Cushing's research on the MyVisit experience will inform future changes to our workflow to ensure equitable access to MyVisit in CHLA's Emergency Department. Findings will add to the literature on use of digital tools in the pediatric emergency department globally.