

Including clinicians in product design delivers impact



About PedsGuide

Children's Mercy Kansas City is a leading independent children's healthcare organization dedicated to providing holistic care, driving translational research, fostering innovation, and educating future caregivers. In January 2017, Children's Mercy launched PedsGuide, a multi-module pediatric clinical support tool designed for healthcare providers, emergency personnel, and trainees to deliver contextually relevant information that helps streamline care for children, especially in high-pressure clinical settings.





The challenge

Healthcare providers, especially those who don't specialize in treating children, often find it hard to keep up with complex medical guidelines.

- Bridging the knowledge gap:
 Many healthcare providers,
 especially those in general or
 emergency care settings, lack
 specialized training in pediatrics.
- Children account for 30% of ER visits, yet only 14% of ERs are certified for pediatric care.



The opportunity

PedsGuide helps overcome the challenges to pediatric care delivery, by:

- Simplifying evidence-based clinical pathways into a user-friendly format, addressing emerging needs identified by clinicians, and making it easier for providers with limited pediatric expertise to navigate evolving clinical guidelines.
- The team at Children's Mercy requires clinicians to contribute their experiences to translate complex clinical practices, such as managing febrile infants, into actionable guidance.

Case study





The approach

PedsGuide employs a modular design that leverages clinician expertise. An interdisciplinary team—including clinicians, pharmacists, and human factors scientists—contributes specialized knowledge to develop and optimize the app. These stakeholders can share their insights without needing technical development skills, ensuring the tool is relevant to real-world clinical needs. To ensure the tool could be used across diverse clinical settings, the robust design was informed by input from these stakeholders.



The success

- The active involvement of clinicians in the development of PedsGuide has bridged the gap between evidence-based practices and practical application, enhancing patient care across environments. New modules are added as clinical champions come forward to lead this translation.
- The success of PedsGuide is evident in its widespread adoption, with over 45,000 installs, indicating significant use across various healthcare settings, including critical access hospitals, EMTs, ambulatory care, pre-hospital care, and rural community practices.
- Its versatility is demonstrated by its use among various healthcare providers, from seasoned clinical professionals to trainees.

We designed the app to aid caregivers at all levels of training and in diverse venues of care, ranging from the prehospital/ EMS setting to inpatient critical care and everything in between."

- Dr. Ryan McDonough

Chief Medical Informatics Officer, Children's Mercy Kansas City