

Children's Mercy Kansas City

SHARE @ Children's Mercy

Posters

10-8-2022

Mobile Health Software Platform Implementation to Improve Pediatric Remote Patient Monitoring Outcomes

Lori A. Erickson

Children's Mercy Kansas City

Amy Ricketts

Children's Mercy Kansas City

Jenny Marshall

Children's Mercy Kansas City

Krista Nelson

Children's Mercy Hospital

Peter Churchill

Children's Mercy Kansas City

See next page for additional authors

Follow this and additional works at: <https://scholarlyexchange.childrensmercy.org/posters>



Part of the [Health and Medical Administration Commons](#), [Health Information Technology Commons](#), and the [Pediatrics Commons](#)

Recommended Citation

Erickson, Lori A.; Ricketts, Amy; Marshall, Jenny; Nelson, Krista; Churchill, Peter; Wolff, Dawn; and Steele, Robert W., "Mobile Health Software Platform Implementation to Improve Pediatric Remote Patient Monitoring Outcomes" (2022). *Posters*. 293.

<https://scholarlyexchange.childrensmercy.org/posters/293>

This Poster is brought to you for free and open access by SHARE @ Children's Mercy. It has been accepted for inclusion in Posters by an authorized administrator of SHARE @ Children's Mercy. For more information, please contact hlsteel@cmh.edu.

Authors

Lori A. Erickson, Amy Ricketts, Jenny Marshall, Krista Nelson, Peter Churchill, Dawn Wolff, and Robert W. Steele

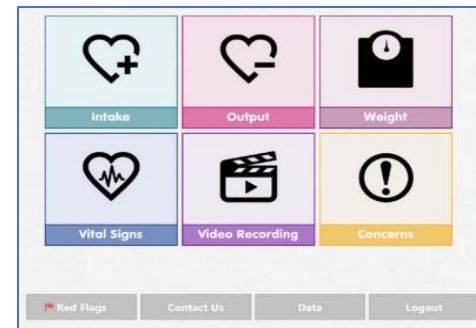
Mobile Health Software Platform Implementation to Improve Pediatric Remote Patient Monitoring Outcomes

Lori Erickson Ph.D., CPNP-PC, Amy Ricketts MSN, CPNP-AC; Jennifer Marshall MPH, RN, Krista Nelson, Peter Churchill, Dawn Wolff, MPA, Rob Steele MD, MBA

Children's Mercy Kansas City

Background

- Children's High Acuity Monitoring Program (CHAMP®) is a software platform for pediatric remote monitoring in home settings.
- Successful implementation of CHAMP in pediatric cardiology since 2014 includes: adoption at 12 U.S. pediatric hospitals and over 960 infants with a survival of 96.5% (down from 20% in 2012).
- A proactive, personalized, pediatric care model with mobile health technology provides a link for communication with specialized healthcare team to patients and families while in their home setting.

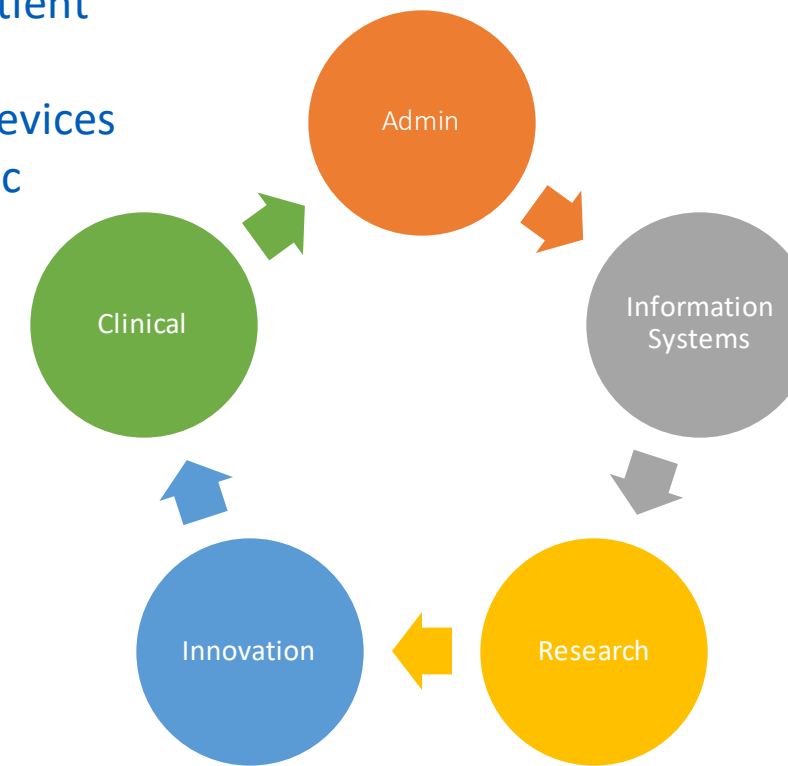


CHAMP App Main Parent Facing Screen

Methods

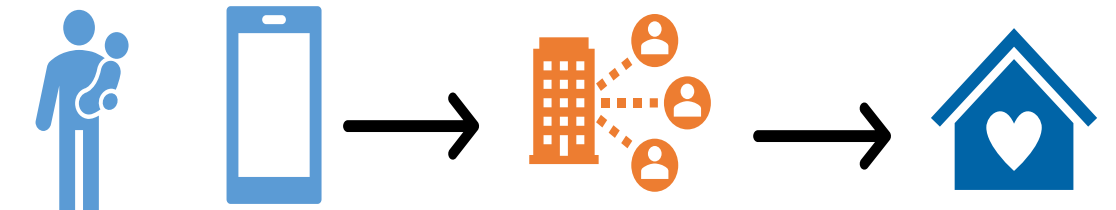
Purpose: To engage leadership to discuss an innovative remote patient monitoring department for application of new monitoring devices and expanded access to pediatric conditions.

Strategic Planning and Innovation facilitated navigation of an enterprise-wide endeavor in a not-for-profit free standing children's hospital over an 18-month period to develop a strategic initiative proposal.



Results

- Staff: 3 Full time FTE's
- Research: 3 active feasibility studies for pediatric monitoring devices
- CHAMP app Cardiac Research Registry: 95% consent rate, 9 active U.S. pediatric hospitals, Four retrospective analyses underway
- Stewardship: Remote Patient Monitoring Billing and Coding work-groups
- Clinical Operations: Expanding CHAMP application use as evidence-based practice improvement into additional pediatric clinical areas



References

- Shirali et al. (2016). *Circulation: Cardiovascular Quality and Outcomes*, 9, 303-311. doi.org/10.1161/CIRCOUTCOMES.115.002452
- Bingler et al. (2018). *World Journal of Congenital Heart Surgery* 9(3), 305-314, doi:10.1177/2150135118762401
- Files et al. (2019). *Progress in Pediatric Cardiology*, 54, doi://10.1016/j.ppedcard.2019.101126
- Erickson et al. (2020). *Journal for Specialists in Pediatric Nursing*, e12303, doi://10.1111/jspn.12303
- Elliott et al. (2021). *JAN*. 77 (5), 2437-2446. doi://10.1111/jan.14785

Results

- Remote Health Solutions (RHS) department was founded in September 2021.
- Goal: the integration of digital health tools into patient care; these include but are not limited to remote patient monitoring (RPM) mobile health (mHealth) applications, hardware, software platforms, and wearable sensors or other devices to improve the healthcare team's ability to provide personalized, proactive patient care.

Conclusion

- The forward movement of pediatric remote health stands at a precipice of opportunity within the landscape of mobile devices and applications in advancing pediatric medicine and outcomes.
- This project magnifies opportunities for evidence-based, innovative pediatric remote healthcare models, locally and internationally, especially in the midst of the pandemic



For more information on CHAMP App



Poster contact: laerickson@cmh.edu