Case study

Scaling Trusted, High-Impact **AI Care Navigation**

Expanding access to cardiac care through AI-enabled remote monitoring

TOPICS: AI-Enabled Care Navigation | Remote Patient Monitoring | Clinical Decision Support

About the organization

ALIVECOR®

AliveCor is dedicated to improving cardiac care through personalized, AI-driven insights accessible to patients and healthcare providers wherever care happens. Founded in 2011, the company introduced the first FDA-cleared personal EKG device. Today, its Kardia products and clinical services support cardiac monitoring and clinical decision-making beyond traditional healthcare settings. AliveCor has recorded more than 400 million EKGs, served over 5 million users, and contributed to more than 250 peer-reviewed studies.

The opportunity

AI-enabled, at-home cardiac monitoring presents an opportunity to expand access to cardiac diagnostics and specialist support, particularly for patients without a local cardiologist. By combining FDA-cleared, medical-grade sensors, clinically validated AI, and remote clinical services, AliveCor aims to help patients recognize potential cardiac concerns earlier, access timely guidance, and connect with appropriate care without relying exclusively on in-person visits.

The challenge

Patients experiencing intermittent palpitations or unexplained near-fainting may struggle to obtain timely diagnoses and treatment, particularly in communities with limited access to cardiologists. This can lead to unnecessary emergency department visits, higher healthcare costs, and additional patient stress and inconvenience.

Access challenges are compounded by a shortage of cardiac specialists:

- The Association of American Medical Colleges projected a shortage of up to 120,000 physicians by 2030, with cardiology among the affected specialties.[1]
- Approximately 55–60% of active cardiologists are age 55 or older, contributing to concerns about future workforce availability.[2]
- An estimated 87% of U.S. rural communities and 46% of U.S. counties lack a practicing cardiologist, leaving approximately 22 million Americans without local access to one.[3]

The approach

AliveCor developed what it calls a cardiac clinical access engine, combining at-home diagnostic technology, AI-driven analysis, and clinical support to help patients detect potential cardiac concerns, understand their results, and connect with appropriate care.

- **Detect:** Patients use AliveCor's FDA-cleared KardiaMobile EKG to capture clinically relevant cardiac data at home. Drawing on a large dataset of EKGs, AliveCor's AI algorithms detect common arrhythmias and identify early signs of risk.
- **Inform:** Patients and caregivers can access their cardiac readings and use the information to better understand potential concerns. Six-lead EKG technology and clinically validated AI provide diagnostic information beyond that available from more limited consumer wellness sensors.
- **Alert:** When readings indicate a potential concern, patients can receive alerts encouraging further clinical evaluation, supporting more informed decisions about when to seek care.
- **Connect:** Patients can access board-certified cardiologists to review EKG data, discuss findings, and determine appropriate next steps through telehealth visits, in-person cardiology referrals, or enrollment in remote patient monitoring for ongoing oversight.

This approach supports proactive cardiac care by connecting at-home monitoring with clinical expertise, helping patients and care teams respond to potential concerns without waiting for a traditional office visit.

The impact

Published research cited by AliveCor demonstrates the potential benefits of mobile cardiac monitoring and remote clinical support.

- ✔ **27% reduction in outpatient office visits** one year after obtaining a KardiaMobile device, alongside reduced in-person healthcare utilization.[4]
- ✔ **Approximately $7,000 in cost savings** per patient associated with home-based sotalol initiation supported by remote EKG monitoring and clinical oversight.[5,6]
- ✔ **3.9-fold increase** in atrial fibrillation detection demonstrated through remote heart rhythm screening.[7]

AliveCor identified an opportunity to strengthen remote monitoring by incorporating additional patient education and community support to help recognize cardiac concerns earlier.

> “The ability to quickly obtain a rhythm strip to determine if my spouse is in afib provides peace of mind. I can avoid a time consuming trip to the ER, text the strip to his cardiologist and follow up accordingly.”
>
> **— Phyllis,** *Patient*

[1] The Complexities of Physician Supply and Demand: Projections From 2021 to 2036, https://www.aamc.org/media/75236/download?attachment

[2] "Resigned to the 'Great Resignation?'" Journal of the American College of Cardiology. Published online June 13, 2022. doi: 10.1016/j.jacc.2022.05.004

[3] Kim JH, Cisneros T, Nguyen A, van Meijgaard J, Warraich HJ. "Geographic Disparities in Access to Cardiologists in the United States." Journal of the American College of Cardiology. 2024;84(3):315–316. doi: 10.1016/j.jacc.2024.04.054. Published online July 8, 2024)

[4] *Johnson DM, Junarta J, Gerace C, et al. Usefulness of Mobile Electrocardiographic Devices to Reduce Urgent Healthcare Visits. AM J Cardiol. 2021; 00: 1–4. P<0.01*

[5] LaBreck, Megan E et al. "*Home Sotalol Initiation for the Management of Atrial and Ventricular Arrhythmias Using Remote Electrocardiographic Monitoring.*" JACC. Clinical electrophysiology, S2405-500X(24)00867-3. 4 Nov. 2024, doi:10.1016/j.jacep.2024.10.003

[6] Roberts C, Sherry M, Labreck M, Amin A, Sullivan D. *Evaluation of a program for outpatient sotalol loading with physician and pharmacist monitoring.* J Am Pharm Assoc (2003). 2022;62(5):1700-1706.

[7] Halcox, Julian P J et al. "*Assessment of Remote Heart Rhythm Sampling Using the AliveCor Heart Monitor to Screen for Atrial Fibrillation: The REHEARSE-AF Study.*" Circulation vol. 136,19 (2017): 1784-1794. doi:10.1161/CIRCULATIONAHA.117.030583