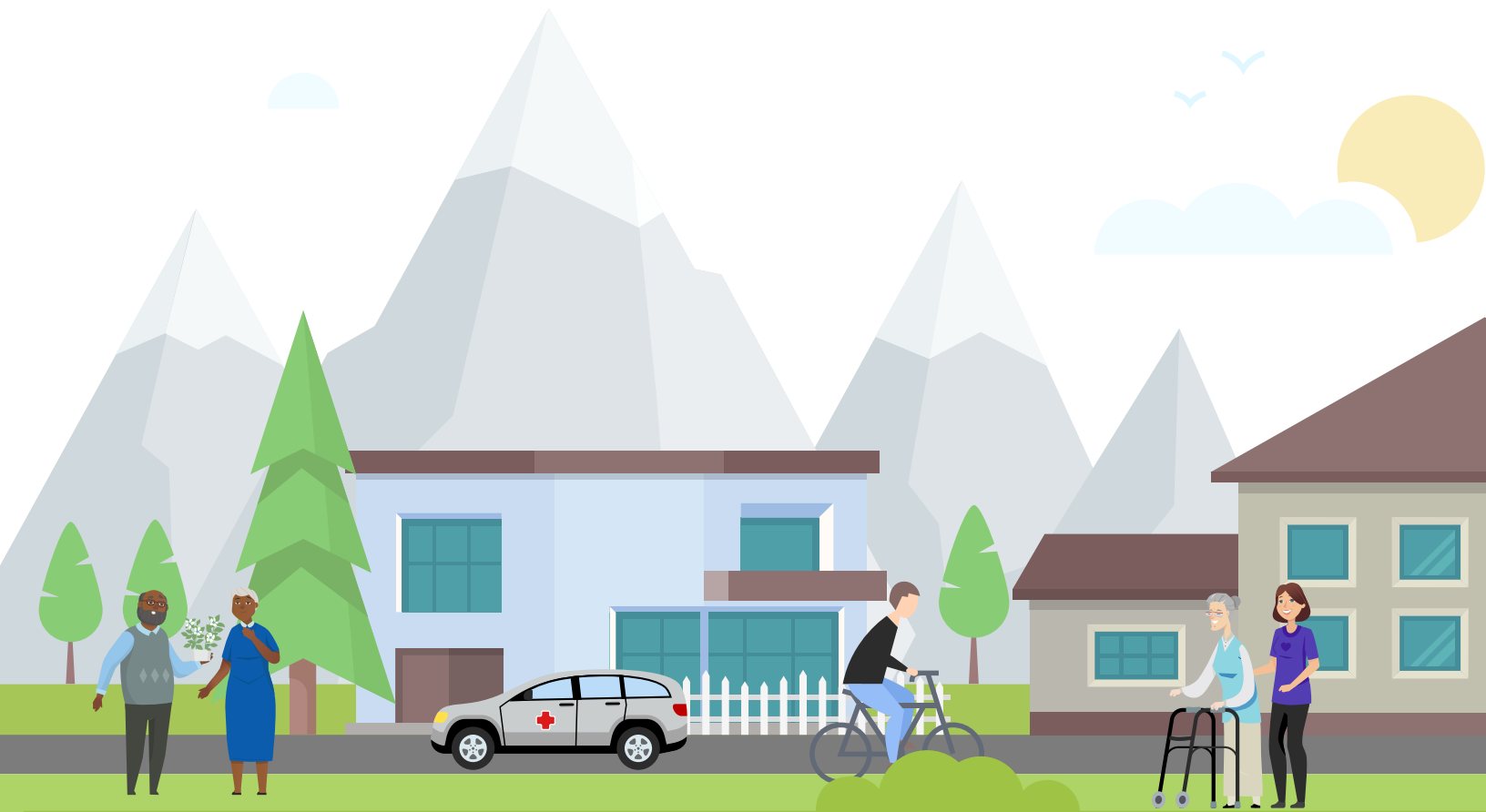


RAINBOW HEALTH

The Evolution of Home-Based Care Models and the Role of Technology as a Driving Force



CARE-AT-HOME: THE NEXT WAVE FOR HEALTHCARE INNOVATION

A care-at-home platform to support healthcare organizations in delivering home-based care. Deliver patient-centric, equitable care, and address their unmet needs via better care coordination.

WWW.RAINBOW.HEALTH

 [company/rainbowhealth-care/](https://www.linkedin.com/company/rainbowhealth-care/)



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INTRODUCTION

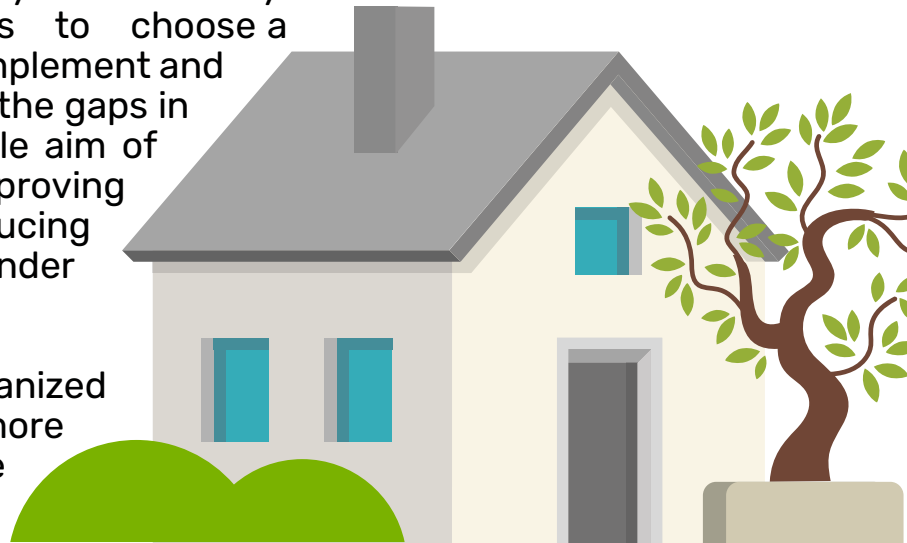
Home-based care is evolving and continues to be increasingly more prevalent as the innovation programs and the regulations around health care are constantly changing. The SARS-CoV-2 pandemic, better known as COVID-19, has accentuated the potential for an improved quality of care, exceptional patient experience, and enhanced clinical outcomes. Care-at-home is advancing as an essential component of healthcare organization efforts to position themselves for success now as well as in the future. As a result, the need for patients to receive care in their preferred setting continues to grow as does the challenges of holistically meeting their needs.

As an advancing payer of home healthcare services, the Centers for Medicare & Medicaid Services (CMS) continues to focus on how the growing needs of the patient population can be addressed with different innovative home-based delivery models. The onus directly or indirectly is on the healthcare organizations to choose a path that helps them successfully implement and execute these programs for closing the gaps in care. They also must meet the triple aim of improving the experience of care, improving the health of populations, and reducing per capita costs of health care under these different care models.

The ongoing pandemic has galvanized healthcare providers towards a more home-based approach for care delivery rather than continuing with traditional in-person visits at clinics or in hospital settings. Additionally, home-based care is reaching new heights to address serious health equity problems and remove disparity. Home-based care is poised to give the disenfranchised better options for receiving care on their own terms.

These new challenges have required healthcare organizations to adopt new technology and tools that can increase effectiveness, scale, expand their organizations into different markets, and serve varied patient populations.

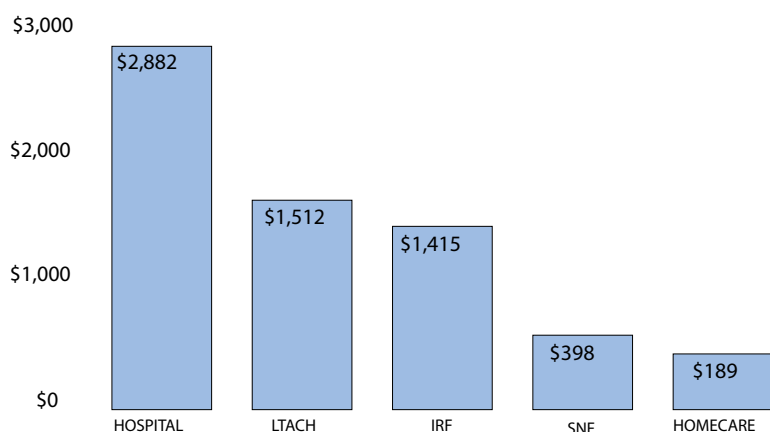
Rainbow Health offers a single command center style dashboard for your organization to simplify your workflows. We operationalize integrated telemedicine, real-time patient communication, and have an in-app dispatch with a safety checks for the care team. Organizations can continue monitoring vitals as a fully functional extension to EHR, manage the logistics and care coordination of ancillary services. They can gain better visibility into the quality and operational metrics through dashboards and reporting capabilities.



PROBLEMS

REGULATORY: Depending on how an organization expands its program into home-based care, there could be different regulatory challenges. There are notable differences in financial, legal, or other operational requirements from state to state. Organizations are expected to implement the federal and state guidelines that apply to them in order to innovate and deliver care in the modality like acute care, palliative care, and transitional care. If they implement their care model across multiple states, this increases the number of policy barriers that they must first get through.

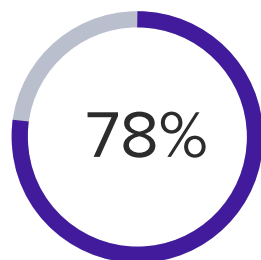
DAILY COST OF CARE BY SETTING - 2021



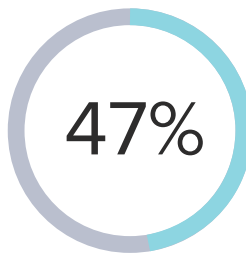
COSTS: From 2009 to 2019 in the United States, clinical costs grew 8.3% per year, and in 2019 alone, 31.4% of \$3,795.4 billion was spent on Hospital costs, that's \$1,192 billion. In 2021, the daily cost of care in a hospital setting was \$2882 compared to the cost of care in the home at \$189. The increasing healthcare expenses are fueling demand for low-cost home-based health care services. As a financial incentive it is in the interest of

healthcare organizations to extend their services into home based settings.

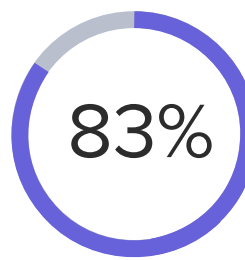
OPERATION COORDINATION: When transitioning care delivery into the home and community setting, challenges such as interoperability, workflows, communication, and the required workforce are still persistent. Healthcare organizations are looking to improve care coordination, help patients have a sense of independence, support care teams and caregivers, all while reducing the total costs of care. However, when providing home-based care, having fragmented communications and no real-time



78% of family caregivers would choose a provider that enabled direct and instant communication



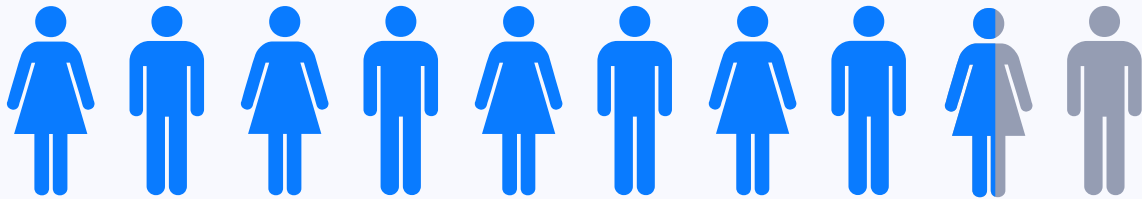
47% of patients had a negative experience not being able to digitally schedule an appointment.



83% of healthcare consumers say their experience is as important to them as the product



PROBLEMS



Since the pandemic, 83.9% of people who have had a virtual appointment, say this was their first time

visibility at various touchpoints of a patient's journey can make the process difficult for the provider and other connected care teams involved in the delivery process.

VENDOR EFFICIENCY: There is a high demand for the ability to use third-party contractors for clinical and non-clinical services and to be able to access them through the use of an integrated platform. In addition, having a way for those vendors to add patient notes within the system is necessary to stay updated with the plan of care and provide real-time status updates with ETAs to care coordinators.

“

Health is the place where the medical model and the social structures converge.

We, as a country, unquestionably know if we want to achieve the kind of outcomes that a civilized democracy should expect, then we must begin addressing these problems.

Dr. Reed Tuckerson

”

HEALTH EQUITY: During this revolutionary time of healthcare, we can use this opportunity to become a society where there is a healthcare model that fits each person and delivers care in the comfortable setting of their own homes.

Finally, but perhaps most importantly, there is also a long-standing and desperate need for healthcare equity. Giving each patient, regardless of wealth, situation, race, culture, language, orientation, or any other

demographics, exemplary care is paramount to the future of healthcare. Care-at-home has what is perhaps the best chance of improving care outcomes but also the best chance of addressing Social Determinants of Health.



EXISTING & EMERGING HOME-BASED CARE MODELS

Healthcare can be difficult to navigate with the constantly changing landscape across longitudinal as well as episodic care models, each focusing on slightly different outcomes and metrics to measure. Health organizations might desire a quick shift from care delivery in traditional settings to a care-at-home environment. Providers who have operational models designed for care only within institutional care settings will face unique challenges when shifting to care-at-home opportunities. Though care-at-home provides higher-quality, lower-costs and better outcomes, health care organizations shifting care will need time to set up financial incentives and adjust to these care models that will garner growth. Traditionally a fee-for-service model has been how most patients have received healthcare. However, recently there has been a shift to value-based care models.



The late pandemic has brought further innovation to the home-based care models with futuristic models such as the Mobile Integrated Healthcare Community Paramedicine (MIH-CP), Direct Contracting, and Emergency Care at-home with subscription payment model. We may likely see many more upcoming models emerge from the need for home-based healthcare.

Home-based palliative care and hospital-at-home models are two examples that illustrate why these models are imperative to improving healthcare delivery. The home-based palliative care model supports patients by preventing and relieving suffering and giving patients with serious illnesses the best quality of life. The home-based palliative care model has saved an average of \$8,196 in the last six months of life.



EXISTING & EMERGING HOME-BASED CARE MODELS

In addition, 67% of home-based palliative care program patients received hospice care at the end of life, compared to 40% of patients that did not receive this option. In the hospital-at-home model, the eligible admitted patients or those who have visited the ED with acute illness can both receive hospital-level care in their own homes. These models have proven to reduce readmissions, lower costs, and improved patient experience.

Home-Based Care Models

Longitudinal	Both	Episodic
<ul style="list-style-type: none"> •Home-Based Primary Care •Home-Based Integration Medical and Social Care •Home-Based Primary Care Co-Management •Home-Based Palliative Care •Skilled Home Health Care •Long Term Services and Supports 	<ul style="list-style-type: none"> •Community Paramedicine •Transitional Care 	<ul style="list-style-type: none"> •Hospital at Home •Rehabilitation at Home

Yet, all of these models must overcome barriers to delivering care by comprehensively adopting technology and supporting resources. To build a sustainable at-home-care model, and achieve The Triple AIM goals, the org must adapt to technological advancements. On average, there are 26% fewer readmissions, and patient costs were reduced between 19% and 38%. In addition, it has the added benefit of keeping patients at home where they are generally more comfortable.



CASE STUDY

OVERVIEW

This case study is about our client, a physician-led medical group serving more than 170,000+ patients, across 18 states, via high-level medical care in the home. By partnering with health plans in more than 52 communities across the U.S., this organization serves the vulnerable population via its multidisciplinary team composed of nurses, pharmacists, nutritionists, behavioral health specialists, social workers, and others. Since the early 2010's they have been one of the earliest mobile medical groups to part with the traditional healthcare model and a 24/7 response for urgent needs. Their patients have seen an increase in healthy days while remaining in the comfort of their own homes. Through the assessment of environmental factors, medication management, and medical care, they have been able to increase the quality of lives of their patients.



Their model supported telemedicine and kept patients safe in their homes through in-person home visits. Having already been at the forefront of providing house calls, they were poised to care for their patients during the pandemic and visited over 300,000 patients in 2020.

PROBLEM

Exponential growth always comes with excitement, but it inevitably comes with uncertainty and a fair share of problems. For example, before finding Rainbow Health, this medical group used an array of fragmented solutions to cover all their needs. As a result, their team was experiencing difficulties logging into various systems, with separate calling lines, a considerable volume of call center calls, and no real-time visibility into the current status of a provider in the field upon dispatch, which led to overall operational and logistical challenges. In addition, the day-to-day activities caused a lot of confusion and made care coordination difficult.

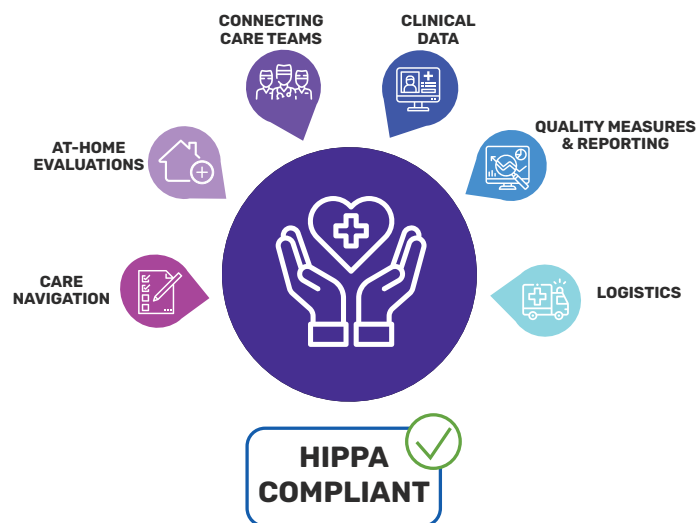


CASE STUDY

SOLUTION

They switched to RainbowCare's comprehensive platform to optimize and streamline their operations and to maximize provider efficiency. Providing their patients with 24/7 coordinated care along with our platform and other tools has led to an almost 28% reduction in hospital admissions and a 26% reduction in mortality.

RainbowCare's dispatching module has helped them expand to more markets and provide better access to care to urban areas and far distant rural communities where there is limited access to providers and resources. As a result, our platform is helping better address some of the inequities within our healthcare system.



1400+ AT-HOME VISITS

6 MONTHS AT-HOME CARE

1200+ HOMEBOUND PATIENTS

90 MEMBER INTERDISCIPLINARY TEAM



WHAT TO LOOK FOR IN A CARE-AT-HOME PLATFORM



CARE NAVIGATION

Role-Based Alerts, Scheduling, Bird's-Eye View, Onboarding & Discharge Planner



AT-HOME EVALUATIONS

SDoH Screening, Assessments, Survey, & Checklists



CONNECTING CARE TEAM

Real-Time Communication: Text, Audio, Video, Group Messaging



CLINICAL DATA

EHR/ADT Integration, Orders, & Referrals



QUALITY MEASURES & REPORTING

LoS, Escalation Rate, Readmissions, Patient Satisfaction & more



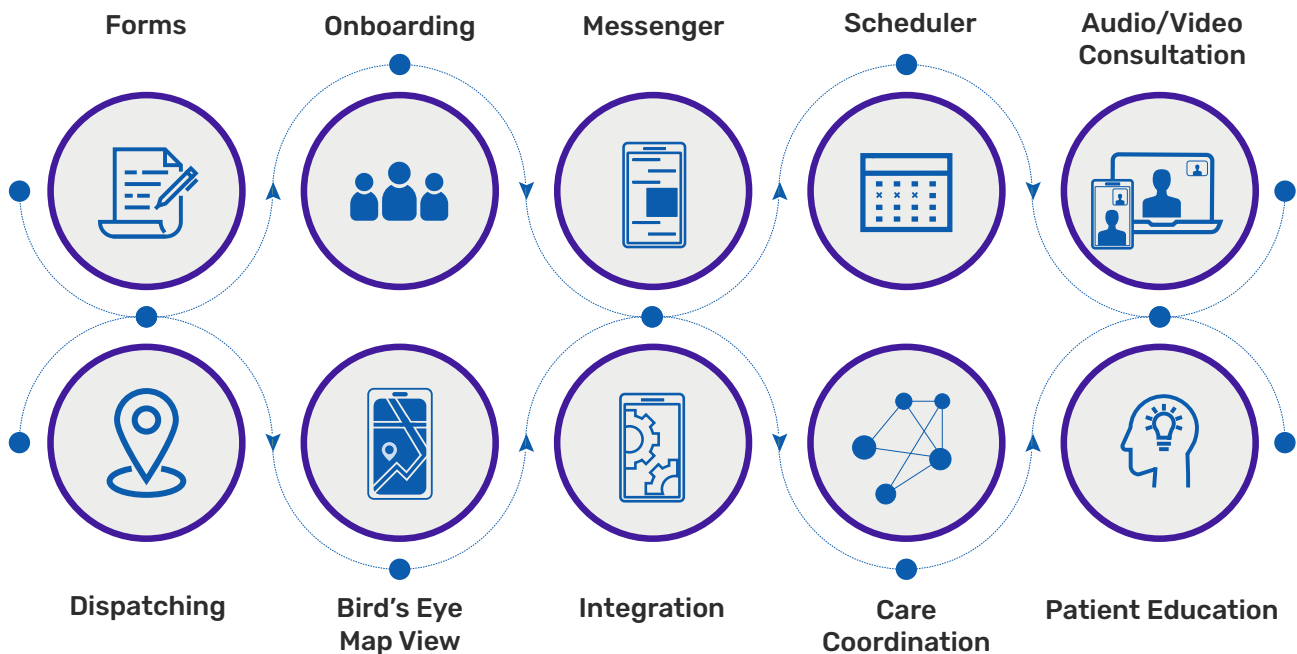
LOGISTICS

Ancillary Services, ETA & Order Status Updates, In-app Navigation, Safety Checks



THE RAINBOWCARE PLATFORM

The World Health Organization has estimated that by 2030 there will need to be an additional 18 million health workers worldwide. With increasing demands in the healthcare workforce, it becomes increasingly important to manage schedules, dispatching, and keeping everything in one easy-to-use platform. RainbowCare is a curated platform built to coordinate end-to-end services for home-based care.



RainbowCare's platform empowers providers with a single dashboard view with real-time visibility into the patient's care journey. Then, where it is needed, field providers like paramedics and EMTs may provide at-home services to fill any gaps in care. When providing home-based care, these field providers can conduct a video consultation with patients while a remote provider will oversee with shared vital signs and other clinical information. In this way, the provider can change or adapt the plan and recommend any interventions to prevent the patient from being readmitted to the hospital. At this pivotal time in healthcare, how we leverage our technology can help to solve long-standing healthcare problems.



THE RAINBOWCARE PLATFORM

For example, by helping our clients serve patients in their home, regardless of where they live, in their language, with respect to their culture, by building technology that can dispatch the correct vendor for the patient's needs.

Our client's success is at the forefront of our minds every day because we know that the lives of your patients are at the forefront of your minds. Our built-in integrated care coordination comes together in one unified place. We have designed our platform to be a scalable tech solution for healthcare providers. The seamless care allows you to integrate with EHR as well as add and update information that can be seen on all fronts across the care team. Not every client needs every piece of the platform, so we designed it to be plug-and-play tailored to their needs.

By 2030 the world will need an additional 18 million health workers.

KEY FRUSTRATIONS PROVIDERS HAVE DUE TO LACK OF INTEROPERABILITY



DELAYS IN CARE

01



LACK OF VISIBILITY INTO PATIENT'S PLAN OF CARE & RECORDS

02



OVER & UNDERUTILIZATION OF SUPPORTIVE ANCILLARY SERVICES

03



MISCOMMUNICATIONS AMONG INTERDISCIPLINARY CARE TEAMS

04

Our many features help simplify workflows and enable better care coordination; scheduling, dispatching, a bird's eye map view, real-time tracking and ETAs, clinical documentation, EHR integration, consent forms, group chat and 1:1 messaging, appointment reminders/notifications, and reporting/analytics.

Through our growing list of clinical and non-clinical vendor partners, organizations can fill the gaps in care in at-home care service reliability. Better patient and caregiver experience is delivered with mobile application and text based interface.



THE RAINBOWCARE PLATFORM

CARE PROVIDERS COLLABORATION

Clean Service Orders
Accurate Plan of Care
Better Communication

PATIENT EXPERIENCE AND SATISFACTION

Access to Care Team
Patient Education
Medication & Appointment Prompts
Collaborative Messaging

EXPANDING HOME-BASED SERVICES

Efficient Service Partner
Integrated Network Coordination
Extendable Communication Resources

COST SAVINGS & QUALITY OF CARE

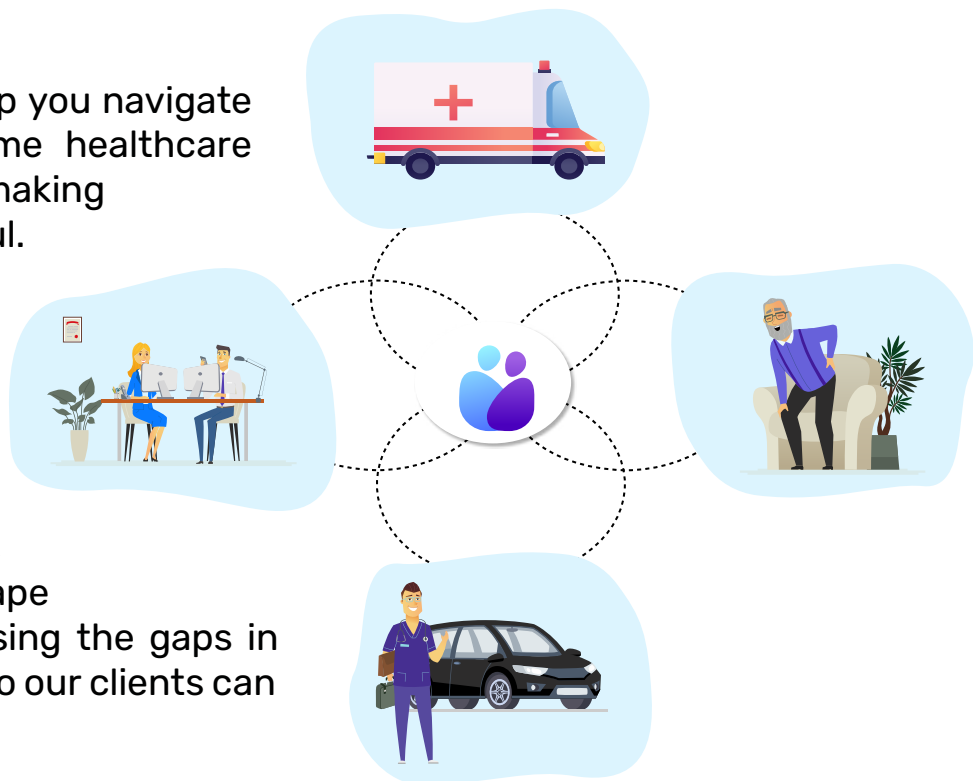
Advances the Triple Aim of Clinical Quality, Affordability & Exceptional Patient Experience

The Impact of Effective Care Coordination

- Reduced hospital readmissions
- Improved patient experience
- Efficient communications between team members
- Better order and referral management

WHO WE ARE

At our core, we are here to help you navigate the ins and outs of the home healthcare pathways so you can focus on making your care delivery successful. The care and dignity of the patients you serve are at the forefront of our minds daily. We created our platform to answer the questions arising every day and help you overcome the challenges in the ever-changing landscape of healthcare. We help by closing the gaps in technology and field services so our clients can close the gaps in healthcare.



TAKEAWAYS

HOME-BASED CARE HAS BETTER SUCCESS WHEN TECH IS INVOLVED

1

When caring for a patient in their home, teams who can easily connect, commute, monitor, document, and communicate with the patient have a higher success rate and better patient satisfaction. Remote patient monitoring(RPM) and clinical pathways integration improves success.

TECHNOLOGY IS ESSENTIAL TO SCALING

2

Scaling an existing care model without falling into disorganization can only be well operationalized and supported through effective and robust technology. Through technology, you can ensure excellent care delivery.

WATCH FOR CHANGES IN HEALTHCARE

3

Measure your program's success. As healthcare evolves, we see more models emerging from innovation. Likewise, technology evolves to keep up and solve new and existing problems. Watch for changing laws, emerging models, and how health technology evolves to keep up.



TAKEAWAYS

ADDRESSING HEALTH EQUITY THROUGH TECH

4

Health equity needs to be thought through strategically. By understanding SDoH, organizations can better support their patients with the right technology and infrastructure while removing disparity and promoting health equity. Overall, home-based healthcare can advance health equity faster.

DISPARITY AND THE TECHNOLOGY DIVIDE

5

As we move further into digital health being essential at home, it becomes ever more imperative that we work towards bridging the technology divide. For example, in offering care to rural, low-income, and elderly populations, the need arises for available technology to provide the same level of care across the board.



CITATION

[Kozak, RN, BSN, Mellissa "9 Must-Have Services" -Citus Health](#)

[US Bureau "An Aging Nation: The Older Population in the United States.", 2022](#)

[Koh, C.Y., "The battle between Episodic Care Versus Care Continuum", December, 17, 2018](#)

["Concierge Medical Services: Designed to handle emergencies, minor complaints and everything in between" 2022](#)

["Current & Emerging Payment Models", 2022](#)

["The Evolution of Home-Based Care During the COVID-19 Pandemic: Lessons Learned & Implications for Federal and State Policy" Moving Health Home January 2022](#)

[Weisfeld, Victoria](#)

[Lustig, Tracy A.](#)

["The Future of Home Health Care: Workshop Summary" 2020](#)

[Yao, Nengliang](#)

[Ritchie, Christine](#)

[Camacho, Fabian](#)

["Geographic Concentration of Home-Based Medical Care Providers" August 2016](#)

["Groundbreaking New Study Proves Home Care Saves Lives and Money" – National Association for Home Care & Hospice, 2022](#)

[Cryer, Lesley](#)

[Shannon, Scott B.](#)

[Amsterdam, Malanie Van](#)

[Leff, Bruce](#)

[Costs for 'hospital at home' patients were 19 percent lower, with equal or better outcomes compared to similar inpatients, June 31, 2012](#)

[WHO, "Health Workforce", 2022](#)

["Home- and Community-Based Services" | CMS. 2022](#)

["Home-based care is ripe for innovation and implementation post COVID-19.", 2022](#)

["Home-based Palliative Care Program Improves Patients' Lives.", 2022](#)

[Bridger, Haley "Home hospital model reduces costs by 38%", December 16, 2019](#)

[Arsenault-Lapierre PhD, Genevieve](#)



CITATION

[Henein MSc, Mary](#)

[Gaid PhD, Dina](#)

[“Hospital-at-Home Interventions vs In-Hospital Stay for Patients With Chronic Disease Who Present to the Emergency Department: A Systematic Review and Meta-analysis” 2021](#)

[“How digital technology can enable health equity and enterprise growth” - EY Sept. 3, 2021](#)

[“How Health Systems Can Use Home Care to Reduce Readmissions”, 2022](#)

[“How Home Care Agencies Can Diversify Revenue”, 2021](#)

[“Landmark’s Whole Patient Care Delivery Reduces Spend and Improves Outcomes” July 20, 2021](#)

[“Long-Term Services and Supports for Older Americans: Risks and Financing Research Brief”, 2022](#)

[“Medical Care at Home Comes of Age” - California Health Care Foundation, 2022](#)

[“Occupational Employment and Wages”, May 2020](#)

[Valjee, Shruti “Understanding Geographic & Demographic Characteristics of Medicare Home Health Beneficiaries as a Baseline for Future Analyses” April 2021](#)

[Piatkowski, MS, EDAC, Melissa](#)

[Abushousheh, PhD, EDAC, Assoc. AIA, Addie](#)

[Taylor, PhD, AIA, MBA, ADAC, Ellen](#)

[“Healthcare at Home: A White Paper” The Center for Health Design, August 2019](#)

[“A Better End of Life Experience: Enhancing Patient Care and Reducing Costs” Health Catalyst, December 2018](#)

[“Home Health Care Cost vs Hospital” Commonwise Care, January 2020](#)

[Med Arrive, 2021](#)





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