

WHITE PAPER

Digital Engagement Strategies to Support Health Equity

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Introduction

In his groundbreaking book about the human condition, *The Anthropocene Reviewed*, John Green states, "Disease only treats humans equally when our social orders treat humans equally."

And indeed, it rings true. In the last few years when the COVID-19 pandemic swept the world, we collectively witnessed the most recent, clear example of the severe and disproportionate impact health disparities can have on entire groups of people. And beyond major events, normal life sees the struggle of daily inequities. Food deserts, physical and mental disabilities, and access issues all add up to a very uneven playing field. How can you ask someone to eat fresh fruits and vegetables if their nearest grocery store (i.e., the gas station) doesn't have a produce section?

According to a study by Deloitte Insights¹, health inequity costs the United States health system approximately \$320 billion a year. This unnecessary healthcare spending is fueled by structural inequalities, such as missed or delayed diagnosis, comorbidities due to lack of access to care, limited access to scientific advances, and other equally unfair yet pervasive issues.

Besides the pure economic cost, there is also the very real human cost: lower life expectancy for entire populations and a significant decrease in the quality of life for millions.

How do we impact a person's life so that health isn't a major obstacle to overcome in the pursuit

of a fulfilling and meaningful life? It starts with an understanding of their unique situation and ends with true connection and impact. Couple that with the ability to scale that impact across thousands of lives, and you are slowly inching closer toward equity for all.

It has been said health equity is both an ideal and a policy goal. As we collectively strive toward a world in which the highest standard of health is accessible to all people, it becomes clear that practical strategies are required to get there.

And these strategies have been forming in the market. In 2022, CMS and NCQA announced new quality measures tied to health equity, requiring a more intentional focus on this challenge. New technology means solutions to inequity that didn't exist before and organizations consistently innovating the next great idea to close the gap just a little bit more.

There are four major areas of opportunity we've identified for focus for any organization looking to do so: accessibility, health literacy, social drivers of health (SDoH), and cultural competency. Though not new, they are large challenges faced by healthcare with clear, actionable solutions already being deployed in the market.

With new technology, policy changes, and intense global awareness, is what was once a lofty ideal now an attainable goal?

Health inequity costs the United States health system approximately \$320 billion a year.¹

\$320^{bn}

IN YEARLY
INEQUITY COSTS

\$1tn

IN INQEQUITY COSTS BY 2040



Accessibility

Accessibility, the most foundational challenge, is, put simply, the ability of all people to access and receive healthcare. The structure of the healthcare industry primarily serves those who have the upper hand, and many people face accessibility barriers, including lack of reliable transportation, disabilities that inhibit access, lack of internet, inflexible work schedules, language

and translation barriers, and even lack of trust in their provider and the health system. Through no fault of their own, the ability for those facing challenges to receive equitable healthcare is nearly impossible due to systems that haven't been designed in consideration of diverse needs and preferences.

DIGITAL ACCESS: AN UNEXPECTED CHALLENGE

To add a layer of complexity, what we collectively thought might be a key solution to the problem has ended up a barrier for millions of people. Indeed, the internet and subsequent innovation of technological solutions in healthcare means greater access, education, and communication—and yet it also means a greater divide.

Digital Access is perhaps one of the most significant impacts on accessibility and is widely identified as a "super determinant" of health because it encompasses all other social drivers of health (SDoH). Though there have been significant decreases in the numbers, the FCC's fourteenth broadband report estimates there are still 14.5 million Americans living without access to reliable high-speed internet.²

This "broadband health gap", as it has been coined, exacerbates the physical and financial barriers to accessing healthcare and has a strong connection to health outcomes as a whole.3 So much of what healthcare offers is online: telehealth visits. patient portals for viewing test results, and online

scheduling. How does one navigate that system if they don't have reliable access to internet? And with entire communities without internet access, it becomes an uphill battle to stay healthy.

CHOOSE YOUR CHANNELS WISELY

One way to directly address issues with broadband access is to use a different channel! Though access to the internet is low. 97% of all Americans own a mobile phone, 90% of text messages are read in the first three minutes, and levels of ownership remain extremely high regardless of SDoH factors such as age, income level, ethnicity, or education.^{4,5}

IVR (automated phone calls) and print communication are also effective channels that don't rely on internet access and can bridge the digital divide for the portions of your member or patient population that are largely cut off from the digital world.

Whatever the method you use, the strategy is clear: meet people where they are. And if they aren't on the internet, you can't rely on only internet-based channels.

ADDRESS ACCESS BARRIERS THROUGH TECHNOLOGY

Conversational AI and Natural Language Understanding (NLU) are two foundational capabilities that will permeate every one of the four health equity challenges we cover in this white paper, but their impact on Accessibility is especially powerful and far-reaching.

Conversational AI is the ability for technology to interpret and intelligently respond to a message creating tailored, human-like conversations with thousands of people at a time without the need for human involvement. Natural Language Understanding (NLU) is the ability for computers to understand the intent of a message even if it doesn't conform to standard, expected responses and to account for humanness (typos, slang, or off script responses). NLU allows the interaction with each person to continue in a way that feels familiar, conversational, and natural.

Health Plan Improves Annual Wellness Visits through SMS and IVR Channels

Approach: SMS and IVR channels were used to reach 372,755 members who haven't yet scheduled or attended their AWV. Links to scheduling and plan resources were embedded via SMS or shared via IVR.

Outcome:

 $11.2\% \qquad \text{of members responded with DONE}$

SMS Reach Rate
150K total members

NR Reach Rate 260,000 calls

A Non-Profit Organization Uses NLU to Overcomes Barriers to Medication Adherence

Approach: A 6 month 2-way SMS program was deployed to help members refill and take their medications. Barrier assessment with NLU was used to identify and overcome barriers to adherence.

Outcome:

26.2% aver engage

average program engagement

85%

Total engagement on fill confirmation workflow

70%

reported finding the program helpful



With these two capabilities coupled together, you have a uniquely powerful tool for assessing and breaking down barriers to access on a large scale, as illustrated in the example below. Organizations can have two-way conversations and get direct, real-time feedback on each person's challenges and respond to provide instantaneous solutions. education, or resources.

Or if you are a plan looking for ways to address the more practical challenge of meeting the new Social Needs Screening (SNS) requirement from CMS, you can deploy this technology through a barrier assessment and/or use uncovered barriers in other workflows to identify members in need and provide resources.

Leading Health Plan Tackles Digital Access Through E-Visit Support Tool Outreach

Approach: A SMS outreach program was deployed to 500,000 members to Increase awareness and adoption of the plan's e-visit support tool and to drive engagement amongst Latino and Black membership.

Outcome:

16.6%

overall engagement rate

click-through rate for key target segments

Standard two-way conversation



Two-way conversations with **m**Pulse





Outcome:

22%

enrolled in SNAP applications

\$1.1m

increase in monthly SNAP benefits

Health Literacy

We want so much from our members and patients. We want them to get all their needed screenings on time, to complete their annual wellness visits and get their flu shots every year, read and understand food and medicine labels, be able to locate the nearest health center when they need it, and understand insurance paperwork and medical bills—all while living healthy lifestyles with the right mix of good nutrition and exercise.

It's exhausting how much we expect from them especially given the systems, paperwork, and fancy jargon that must be navigated to meet those expectations. That's where health literacy, the ability for a person to find, understand, and use health information, plays an essential role.

The impact of health illiteracy in the United States is well known and well documented. With 35% of the adult US population having basic or below basic

Large Healthcare Organization Improves Health Literacy with **Streaming Health Education**

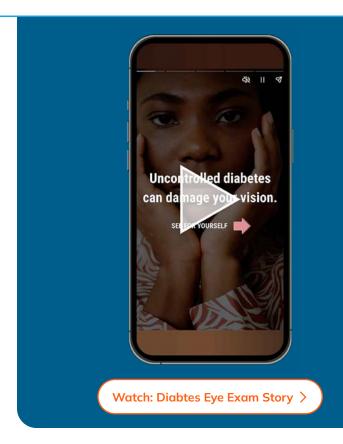
Approach: This organization delivered cinematic educational content to help members build knowledge of key health topics, such as Fertility, Maternity, Heart Health, and more. In-lesson calls to action, and self-reported satisfaction surveys were administered to assess satisfaction, while providing support and resources as needed.

Outcome:

70 min

average engagement time per member per session

more time spent by members engaging with content over the previous year



health literacy, it is estimated that inadequate health literacy adds an additional \$106-\$238 billion in cost to the health care system—a staggering number.6

And the country is standing up and paying attention. The US Department of Health and Human Services made health literacy a central focus of their Healthy People 2030 report; In its 2024 Medicare Advantage & Part D Final Rule (CMS-4201-F) released earlier this year, CMS is proposing new requirements for MA organizations to develop programs and procedures offering digital health education specifically around improving access to Telehealth services and benefits.7

So how do healthcare organizations go about not only satisfying the new quality measures but implement digital engagement strategies to promote health literacy in a way that has a true impact on the quality and longevity of life for those under their care?

REFINE YOUR COMMUNICATION STRATEGY

It first starts with the most basic aspect of engagement: the way you talk to people. For example, almost half of American adults read below an 8th grade level, yet health content on average reads at a 12th grade level.

When outreaching, we recommend:

- Using clear, relatable, readable, and actionable language
- Defining and breaking down complex terms
- Using visuals to make information engaging and understandable
- leveraging multiple channels to improve retention

This is all down to the design of your program. At mPulse, we utilize a team of engagement and communication experts, behavioral scientists, and learning strategists to ensure every message sent is thoughtfully crafted and purposeful—down to the culturally appropriate word choices, diverse authority figures, and language preferences.

Healthcare Organization Improves Blood Pressure and Overall Health for Members with Hypertension

Approach: This organization's 6-month program provided a team of coaches and digital resources coupled with mPulse's tailored and dynamic SMS messaging. It aimed to help members overcome barriers, build health skills, and stay on track to reach their health goals.

Outcome:

engagement rate

link click-through rate

86.8% response rate



Path Health: Hi Ellis, please arrive promptly for your scheduled appt tomorrow. Reply RS to reschedule. Click path.in/nnline for details about your appt.

Path Health: Thank you for letting us know that you wish to reschedule. We will call you soon to schedule a preferred date.



LEARNING STRATEGY & STREAMING HEALTH CONTENT

Pairing a strong learning strategy with our previously discussed technological capabilities (Conversational AI and NLU) allows an organization to identify the reason an individual isn't seeking care (maybe they don't know how to find a doctor) and deliver to them engaging, helpful content that will educate them and raise their overall health literacy level a bit each time. And as we know, when the door for care is opened a bit wider for one person, it makes the healthcare system a little more equitable for all.

There are three important factors come into play when crafting a comprehensive learning strategy:

Streaming Health Content

Streaming health content is one of the most effective methods for health literacy promotion available on the market. It borrows from the best of digital content strategy, behavioral science, and instructional design to create powerful learning experiences to address health literacy barriers in a consumer-friendly format which encourages people to take control of their health outcomes.

From short, animated videos and interactive activities to media-rich online lessons and courses taught by leading health experts, there are many different and innovative ways to create and provide content to your health consumers.

When healthcare organizations take the innovative approach of creating educational health content (videos, bite-sized content, interactive FAQs, polls, quizzes, and more) and incorporate it in their outreach, we see much longer engagement times, the underlying problem of health literacy improve, and the fostering of better relationships between healthcare organizations and health consumers.





The Storytelling Effect

The storytelling effect states people experience and retain stories far better than facts alone. In fact, stories have been proven to be 22x more memorable than facts, and because stories universally activate brain regions dealing with emotional processing and memory, when a person hears a story, there are eight areas of the brain that are activating (as opposed to facts, which only activate two areas). Research implies that the brain responds to the story events as if they were happening to the listener.

In health engagement, however, we aren't telling stories just to entertain. While entertainment is a respectable goal and key part of the equation, our main objective is to drive a specific action, such as getting that gap closure or convincing someone to set an appointment. That's where it becomes critical to engage and educate individuals using all tools at your disposal, and we recommend storytelling be a part of that.

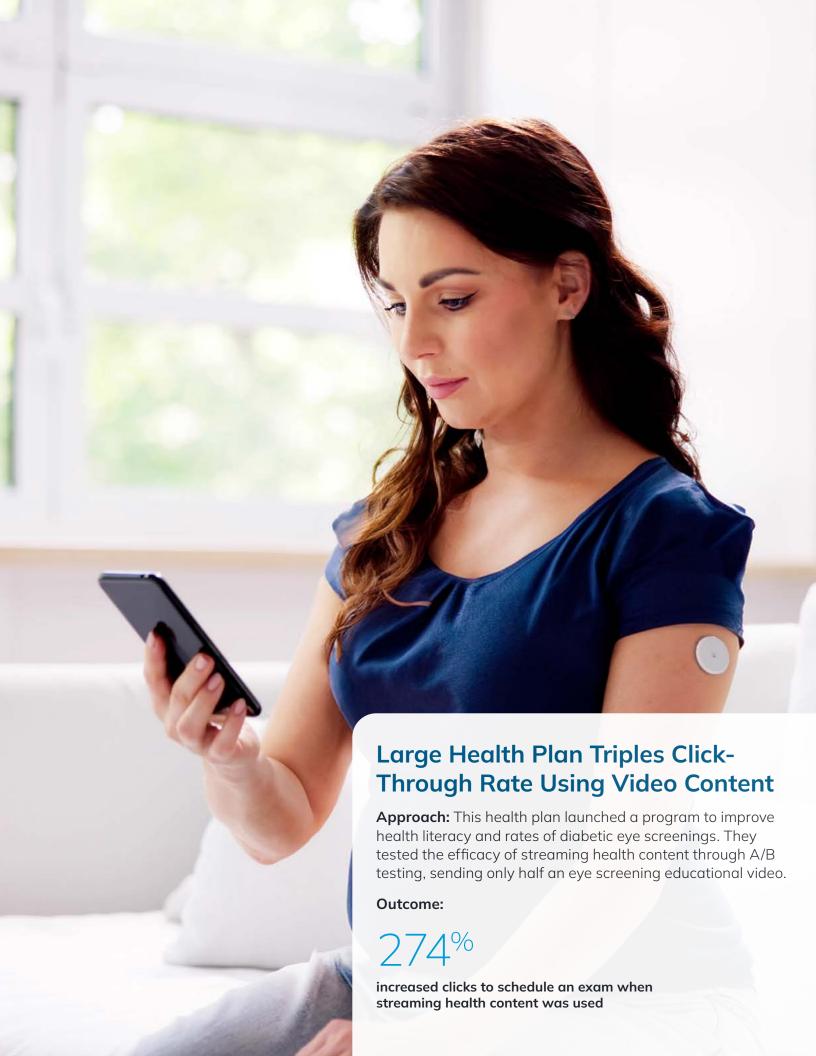




Clear, Robust Calls to Action

Calls to action embedded within the learning experience are vital. Think about it this way: all the health education you deliver ultimately falls short if you aren't making the ask. When crafting your call to action, make sure it is not only closely tied to the content being delivered but it is also specifically based on that recipient's needs.

For example, a plan launching a program to increase flu vaccinations should have a clear call to action at the end with a link to schedule or visit their nearest pharmacy, clinic, or provider.



Social Drivers of Health

Nothing may affect an individual's access to care more than their social drivers of health (SDoH), and research widely shows SDoH have a greater impact on health and well-being than medical care itself. One researcher at Virginia Commonwealth University even estimates 10-20% of health outcomes are associated with healthcare and the rest are impacted by social and economic factors. SDoH are so important, in fact, that the Department of Health and Human Services (DHHS) has named it one of the five overarching goals of their Healthy People 2030 report.8

And they have very real consequences: infant mortality is just one example. The rate of infant deaths more than double for Black babies compared to the rate for Hispanic and White babies; people in lower income communities are more likely to experience mental illness, chronic disease, higher mortality, and lower life expectancy; people in the top 1 percent of income are expected to live between 10 and 14 years longer than those in the bottom 1 percent; finally, even the zip code you

Social Determinants of Health



Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved 01/19/2024, from https://health.gov/healthypeople/objectives-and-data/social-determinants-health

live in can affect your health. Those who live in neighborhoods close to air pollutants (highways, plants, hazardous wastes sites), in a food desert, or outside of internet access areas experience more negative health effects.

Healthcare organizations cannot change a person's physical disabilities, income level, or address, but they can be aware of these factors that affect health and use digital channels and engagement strategies to connect individuals to tailored resources and services to address these disparities.

Covid19 Vaccination Outreach

Goal: A leading Medicaid MCO in Illinois aimed to address the underlying factors that drive vaccine hesitancy, provide availability information to those ready to take the vaccine, and increase vaccine readiness in the population.

Approach: They delivered compelling, tailored content to activate members while addressing cultural, linguistic, and health equity concerns. 2.6M messages were sent and 1.8M dialogues were initiated. 199K Medicaid members in Chicago area were targeted. The population has an average SDoH score of 82, with 87% reporting high or very high needs for health disparities.

Outcome:

replied to a message compared to an 8–10% average

13.7% clicked on at least one link

5 said they were more likely to get their vaccine

EMPLOY SDOH INDEXING

It all starts with the data. Data can help you predict how SDoH factors may impact each individual, which then allows for tailored outreach that is respectful of and responsive to health beliefs, practices, and needs across diverse populations.

mPulse, for example, provides a proprietary SDoH Index by drawing from a mix of public and private data sources. By using disaggregated data, which ensures representation of marginalized populations, our index leverages a weighting system to maximize its predictive ability and can factor in food insecurity, transportation access, neighborhood, and environment for each individual member to understand their unique needs and provide a more tailored, relevant, and empathetic conversation.

Major Health Insurer Leverages a **Multichannel Approach to Improve Medication Adherence**

Approach: This health plan had the goal of driving increased cost savings and better health outcomes by encouraging members to refill their prescription medications using multichannel outreach.

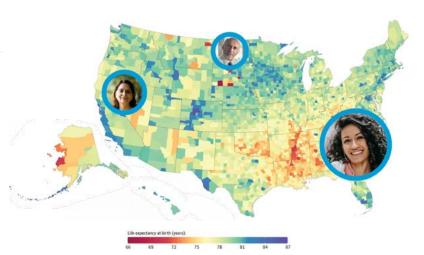
They leveraged SDoH insights and previous program performance to inform outreach strategy and tailor communication to drive optimal engagement. This program included a multichannel combination of SMS, IVR, email, and mobile web.

Outcome:

email open rate

SMS response rate

IVR answer rate



CLOSE THE LOOP

Just having the data isn't enough, though. You must also have a way to use it on a large scale and to improve it over time. With Conversational Al and NLU, you can take the SDoH Index and use it to support tailored conversations across your entire population. The data coupled with the technology allows the organization to understand the challenges of each individual and outreach in a manner that is respectful of and responsive to health beliefs, practices, and needs across diverse populations—with the key goal of connecting people to the community-based resources they need to overcome those barriers to health.

For example, a major health plan that mPulse partners with has initiated proactive outreach aimed at connecting its members to communitybased resources, such as applying for the CalFresh program, California's food stamp program, tax filing preparation support, and resources that can assist members in obtaining their owed Child Tax Credit.

Ultimately, as people engage with these tailored programs, their responses help to validate the SDoH Index's predictions and provide deeper insights. Organizations can collect data points from these conversations which satisfy HEDIS requirements for Race and Ethnicity Stratification (RES), and these data points can be automatically updated in the member profile.

Cultural Competency

Though largely tied to race and ethnicity, cultural competency encompasses a much broader concept and includes all groups that may have differing experiences which impact their interactions with the healthcare industry, such as people with disabilities and LGBTQ+ populations.

The 2024 Final Rule from CMS states that plans should "ensure services are provided in a culturally competent manner; ensure provider directories

include provider cultural linguistic capabilities including ASL". But beyond satisfying quality measures and the integrity that comes with respect for another's unique background, there is a true lift in positive health outcomes that comes with a culturally competent approach embedded in an effective digital strategy.7

And the foundation for cultural competency starts with the design of your outreach.

LANGUAGE AND WORD CHOICE MATTER

Speaking to your health population in their preferred language is a fundamental practice for cultural competency. mPulse's NLU is available in 7 languages with an ability to translate programs into 150 languages, and we provide multilingual streaming content and video courses using ASL interpreters.

But getting to the next level means having the ability to adjust: if you are speaking to your member in one language, such as English, and they answer in Spanish, your program should have the capability to take in that information, switch mid-conversation into Spanish, and notate their member profile for future interactions.

In whatever language you are communicating, word choice can build or erode a relationship. Certain words can be triggering and create distrust or conversely can show a deeper understanding of an individual's culture and life. For example, A health plan who partnered with mPulse recently ran a diabetes and blood pressure program targeting African American and Hispanic members, which provided food recommendations for healthier eating. What is considered healthy eating and food

preferences are largely determined by a group's cultural background, so the recommendations made shifted dependent on the ethnicity of the member being contacted to be more relevant to that member's cultural eating habits.



THE POWER OF PERCEPTION

Perception Bias tells us we have a tendency to perceive ourselves and our environment in a subjective way. When creating outreach and streaming content, organizations should strive to create characters and storylines that resonate with their audience. For example, the below fotonovela used in a colorectal cancer screening program was developed in Spanish and English with separate versions for men and women.

To ensure that the fotonovelas were compelling, the storyline used characters who were 50-75-year-

Cultural Competency is Displayed During Outreach for Colorectal Cancer Screenings

Goal: Boost CRC screening completions using multilingual SMS messages and fotonovelas to 11.000 unscreened members.

Approach: This program included multilingual digital fotonovelas developed to be culturally relevant. Relatable fotonovela storylines and characters which mirrored the targeted population were designed to overcome barriers and empower members to complete screenings.

Outcome:

41.9% engaged with text and fotonovela outreach

of members "loved" the fotonovelas

of members "liked" the fotonovelas

old Hispanic or Latino patients and who looked and talked like they could be the patient's best friend or neighbor. And the fotonovelas reflected the central role of family in the Latino community by emphasizing that the characters were getting screened not just for their own health, but for the sake of their loved ones as well.

And if you do use authority figures in your programs, such as doctors or other experts, it's helpful for the background of those doctors to resonate with the audience thereby creating a sense of self for the viewer as the example below does.



CULTURAL HUMILITY

Cultural Humility is an ongoing process of selfexploration and self-critique combined with a willingness to learn from others. We all have our own blinders and biases to overcome and listening and evolving is a key part of the process.

How does cultural humility show itself for us? The ability to collect back data; for our technology to be able to listen and help us learn and adjust on a large scale; and our team of experts, scientists, and engineers analyzing, refining, and optimizing our programs based on engagement results and individual member responses. With this mindset, all future programs are deployed with the intent of becoming a little closer to a fully equitable experience than the last.

Medicaid Gap Closures Improved Using a Multilingual Approach

Goal: Drive historically unengaged members to close care gaps.

Approach: Members were contacted through English or Spanish languages, broadening accessibility to education and resources for scheduling.

Outcome:

43%

of engaged members closed care gaps

California Health Plan **Outreaches in 7 Languages**

Goal: Encourage eligible members to receive their Covid-19 vaccine, provide education and transportation assistance, and raise awareness of the \$25 per-dose incentive offered.

Approach: The program targeted 425,000 members and delivered 1.4 million messages across 7 languages targeting groups highly impacted by Covid-19. It also had a separate homebound text program, which targeted ~230k members.

Outcome:

Black Medi-Cal population vaccinated (8% more than state avg)

Hispanic Medi-Cal population vaccinated (3% more than state avg)



Conclusion

The introduction of the concept of health inequity in the 1960s slowly over time transitioned into a gained attention and wide acceptance of the realities of inequity. Then slowly rumblings of a need to do more have become a clear movement toward real action.

So, how do we recommend healthcare organizations combat the health inequities that persist in this country and around the world?

It's a complex yet highly effective recipe: science-backed program design crafted by experts in behavioral science, learning strategy, health communications, and linguistics and the ability to deploy those programs across multiple channels; beautiful, impactful, production-quality educational content built on a foundation of behavioral science and cultural competency; a data driven strategy with the ability to feed large amounts of information into programs and bake the resulting data into future interaction—all layered on top of a strong technology platform with powerful Al capabilities to ensure large-scale deployment.

No two people are alike and thus no two health journeys are alike either. But having personal, one-to-one, conversations with every member in your population to identify and break down the barriers to health equity was incredibly unrealistic—until technology stepped in.

Health inequities are a pervasive, ever enduring, and seemingly insurmountable problem that exists in the very fabric of our society. It's a fair question of whether we can ever eradicate them completely, but there is no doubt that with all we've discussed here we can make a sizable dent and thus make quality healthcare a bit more accessible for all.

To learn more about mPulse solutions, visit us at www.mpulse.com.



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mPulse, a leader in digital solutions for the healthcare industry, is transforming consumer experiences to deliver better, more equitable health outcomes.

By combining Al-powered analytics, omnichannel outreach and digital health navigation technology, mPulse creates personalized health journeys and provides advanced insights to power collaboration across the healthcare ecosystem.

With over a decade of experience and 4 billion consumer touchpoints annually, mPulse is the trusted engagement partner for over 300 healthcare organizations.

To ask a question or request a call, go to: <u>mpulse.com/contact</u>

