



CASE STUDY

Mitigating Social Isolation With Conversational AI



Managing the care of a population, especially during the COVID-19 pandemic, requires a holistic approach that addresses both body and mind. Social isolation threatens us physically and mentally, and increases risks of mental and psychosomatic disease.

The American Psychological Association determined that lack of social connection heightens health risks as much as smoking 15 cigarettes a day or having alcohol-use disorder¹. Most vulnerable are the immune-deficient and those with chronic conditions like heart disease or diabetes². Furthermore, evidence suggests that even short-lived isolation can cause chronic psychological problems consistent with post-traumatic stress.

These risks are not, unfortunately, isolated to crises like COVID-19. The number of people living alone has risen this last decade, as has the incidence of social isolation. A national survey (2018) by CIGNA suggested that loneliness had reached an all-time high—half the 20,000 survey members reporting that “they sometimes feel alone.”³ Importantly for healthcare, actions taken to combat loneliness during this crisis will also help guide longer-term mitigation efforts.

Inland Empire Health Plan (IEHP) is a top-10 largest Medicaid health plan and the largest not-for-profit Medicare-Medicaid plan in the country. It serves more than 1.2 million residents in California’s Riverside and San Bernardino counties. They partnered with mPulse Mobile to deploy a conversational engagement solution to combat the adverse impacts of loneliness.

300%

**INCREASE IN RISK
OF STROKE
OR CORONARY
HEART ATTACK
ATTRIBUTED TO
LONELINESS**

Goals

IEHP looked to uncover social isolation challenges of the COVID-19 pandemic among a Medicaid and disabled member population and address them with tailored support. By encouraging development and enhancement of meaningful relationships, they sought to mitigate the mental and physical health effects of social isolation. This support and the individualized interaction it involved would help members maintain routines and a sense of productivity.

The use of an automated and conversational solution presented an opportunity to provide rapid engagement at scale while addressing the needs of each member. The implementation would assess each member's self-reported level of social isolation and uncover specific challenges in order to tailor subsequent messaging. An initial welcome text would trigger a cadence of messaging and content, further configurable by members to ensure their preferences were being met.

Execution

IEHP identified approximately 93,000 Medicare and disabled members that could benefit from the program due to risk of isolation. mPulse Mobile's COVID-19 Social Isolation Engagement Solution was implemented over 6 weeks using SMS messages, with links to rich content. It delivered supportive messaging with tips, strategies, and 15-30 automated interactive check-ins to see how the member was coping. Content—including text message dialogues, links to resources, and fotonovelas—was tailored to member needs. The fotonovela content, which uses visual stories and comic-style characters to deliver relatable and impactful health messaging, was part of an ongoing strategy to deliver content that would reach traditionally harder-to-engage members with differentiated material. Topics included tips on relaxation and stress management, the importance of exercise and sleep, recipes and nutrition, interactive dialogues to determine key challenges, and reminders to reach out to family and friends. After 3 initial questions, responses were analyzed by mPulse's Activation Intelligence and members then followed tailored pathways (e.g. "depression" or "weight gain") with relevant content based on their individual preferences and profiles. Content was delivered primarily in Spanish and English, addressing almost 95% of the population. mPulse assisted with content creation in other languages as needed.

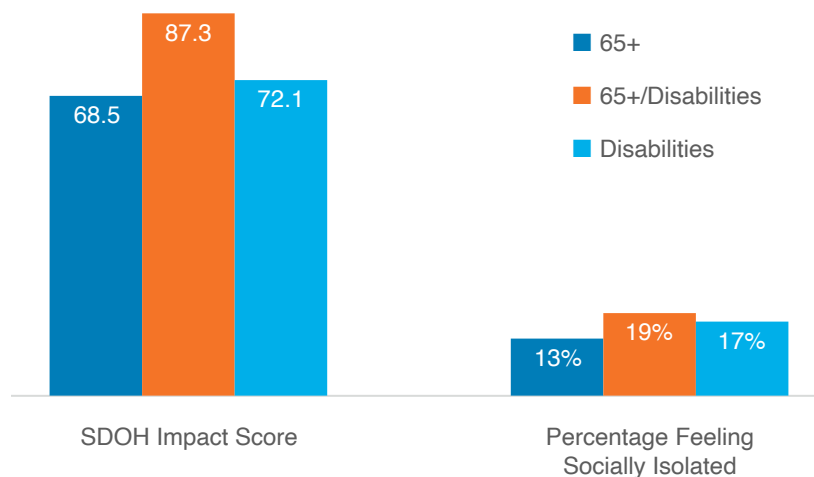
EXAMPLE OF A FOTONOVELLA FRAME



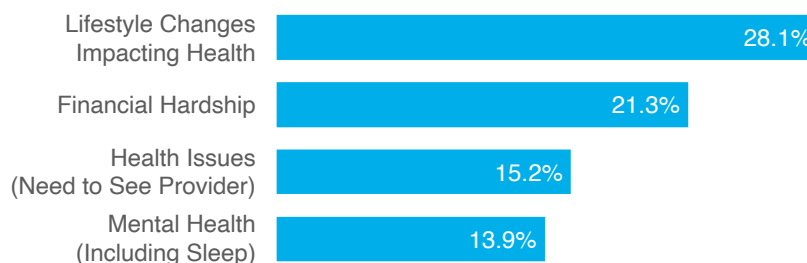
Results

The conversational solution, involving almost 2 million messages (average 21 per member), was highly successful at driving positive outcomes. IEHP reported that the program enabled them to keep in touch with their more vulnerable members and let them know that they were not alone. This was especially relevant to the higher risk members—those with a disability. This cohort exhibited greater prevalence of isolation, and higher impacts of SDOH factors.

SELF-REPORTED SDOH AND SOCIAL ISOLATION FOR 65+ MEMBERS AND MEMBERS WITH DISABILITIES



BIGGEST CHALLENGES REPORTED BY PROGRAM MEMBERS



CASE STUDY RESULTS

43%

TARGET MEMBERS WHO ENGAGED WITH THE PROGRAM

86%

RESPONDENTS WHO LOVED OR LIKED THE PROGRAM

83%

VIEWERS WHO LIKED OR LOVED THE FOTONOVELA

90%

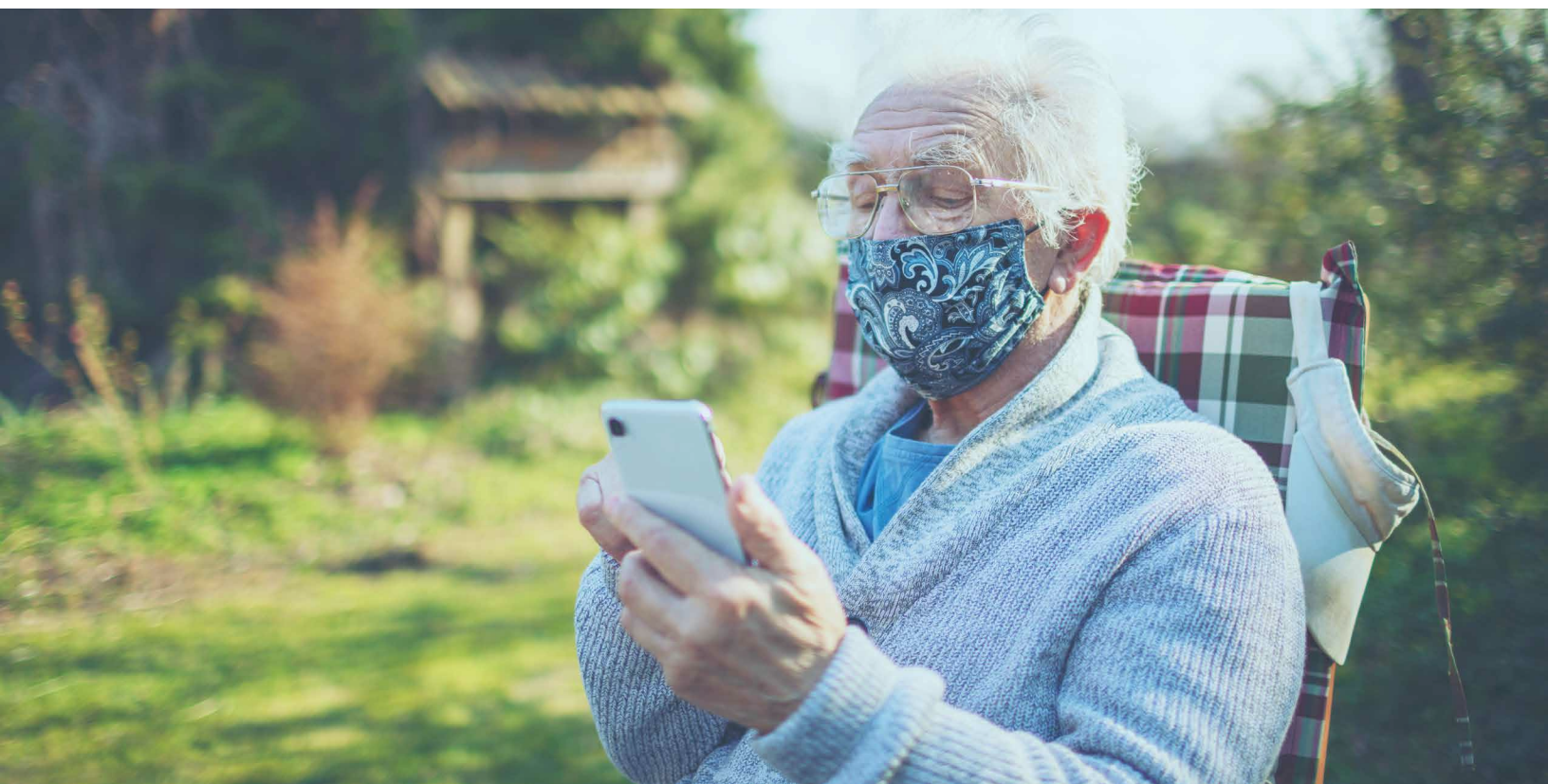
RESPONDENTS WHO MADE POSITIVE BEHAVIOR CHANGES

A robust 40.3% of targeted members across all demographic segments engaged with the texting program. Program satisfaction was very high, with 86% of respondents finding it “very” or “moderately” helpful. Over 90% of respondents also reported activating positive behavioral changes as a result of the program.

Fotonovelas, used as a narrative messaging reinforcement, formed a key part of the strategy. Over 83% “liked or loved it.” Significantly, both Spanish- and English-speaking groups found the experience similarly enjoyable.

Conclusion

The Social Isolation Engagement Solution was well received by a significant cross-section of the target population. Most who participated valued the experience greatly and made beneficial behavior changes to address their loneliness. Although nominally used for the pandemic, the program’s success has broader implications. Its ability to inspire routines and relationships, help members connect emotionally, and foster healthy behaviors can, collectively, combat the perennial and growing issue of loneliness and its attendant health risks.



References

1. A. Novoney, "The Risks of Social Isolation," Monitor on Psychology, The American Psychological Association, May 2019, Vol 50, No. 5 <https://www.apa.org/monitor/2019/05/ce-corner-isolation>
2. S. Gupta, "Social Distancing Comes With Psychological Fallout," Science News, Society for Science & The Public, March 29, 2020, <https://www.sciencenews.org/article/coronavirus-covid-19-social-distancing-psychological-fallout>
3. Cigna US Loneliness Index 2018. <https://www.cigna.com/assets/docs/newsroom/loneliness-survey-2018-updated-fact-sheet.pdf>

About mPulse Mobile

mPulse Mobile, the leader in Conversational AI solutions for the healthcare industry, drives improved health outcomes and business efficiencies by engaging individuals with tailored and meaningful dialogue. mPulse Mobile combines behavioral science, analytics and industry expertise that helps healthcare organizations activate their consumers to adopt healthy behaviors.

With over a decade of experience, 100+ healthcare customers and more than 300 million conversations annually, mPulse Mobile has the data, the expertise and the solutions to drive healthy behavior change.

To ask a question or request a call, go to: mpulsemobile.com/contact

