

trusted messengers

2020 – 2021
IMPACT

Minority populations bear a disproportionate burden of the morbidity, mortality and prevalence of respiratory illness, including asthma, COPD and COVID-19.

Outreach through trusted local institutions and health coaches from within the community, coupled with the latest technology in disease monitoring, may reduce health inequalities and poor outcomes.



Trusted Messengers Study Objectives

To engage underserved populations in COVID-19, asthma, and COPD screenings.

To engage at-risk populations identified in these screenings in a 16-week program including virtual education, app-based telehealth access and monitoring with English and Spanish speaking health coaches, and connected devices to monitor spirometry, pulse oximetry, sleep and breath biomarkers.

To measure program success through engagement metrics: number screened, number enrolled in at-risk program, retention rate throughout the 16-week program.

To measure program impact on health through change in health-related quality of life, symptoms, disease management and control assessments from baseline.

The Not One More Trusted Messengers pilot program was conducted in Atlanta, Georgia. It engaged faith-based organizations and historically black education institutions to recruit African Americans and Latinos into the broader program.

As of March 31, 2021, the pilot successfully screened more than 1,200 patients, with 156 meeting inclusion criteria for self-management skill development via telehealth and digital health. A total of 72 patients were enrolled in the follow-up program, which concluded on March 31, 2021. Of the 1,039 patients tested for COVID-19, only 1.82% had a positive COVID test result. The pilot program distributed more than 3,000 masks, gloves and hand sanitizers. Moreover, 1,000 food vouchers and flu vaccine vouchers were distributed to patients and families in need.

The pilot program resulted in:

> 12 billion
traditional media impressions

> 500,000
social media impressions

This was achieved not only via the use of Allergy & Asthma Network channels, but also key social influencers including R&B singer and pastor Montell Jordan and the Atlanta Mayor's Office. Digital engagement for the TrustedMessengers.org and AllergyAsthmaNetwork.org web sites has exceeded 1 million unique visitors since the project began in September 2020. Cable television outlet BET is now planning a spotlight segment to highlight the program.

Methodology

Recruitment
Landing Page

Distributing
COVID-19 Insights

Targeted
Facebook Ads

User Engagement

Download
Health
Storylines app

Participants
interact
with app

Engagement
materials tailored
to participant

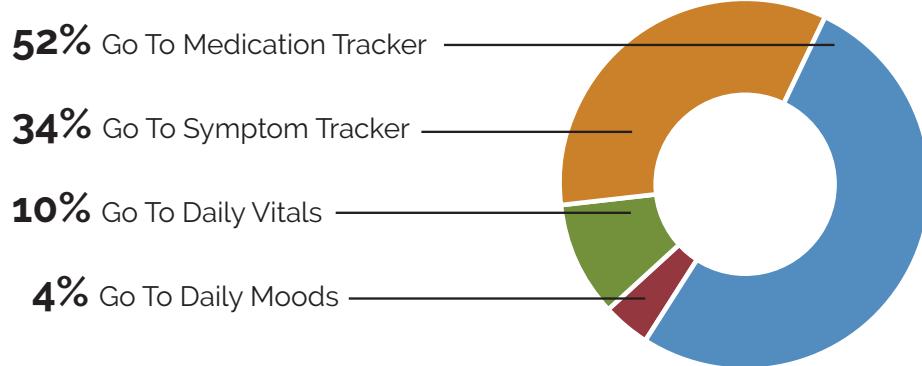
My Journal tool
for reflection &
documentation

- The participants of the study were highly prolific. The average app sessions per user was 86.3 sessions per user over the course of the study.

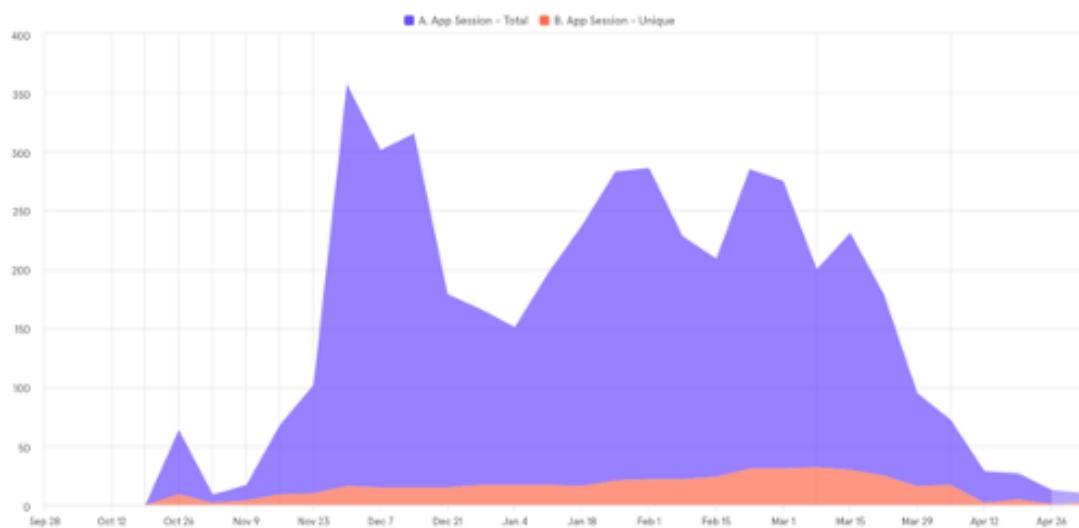
- Tailoring engagement materials to the cohort brought about higher open and click rates compared to Health Storylines communications.
- The My Journal tool enabled participants to actively reflect and document their physical and mental health throughout the study.

Over the course of the study, participants who downloaded the Health Storylines app engaged with the core tools over 14,000 times. The most used tools were the medication tracker and symptoms tracker.

Engagement with Core Tools



Weekly User Engagement



Personalized Patient Engagement

Tailoring engagement materials to the cohort brought about higher open and click rates compared to Health Storylines communications.

Email/Cohort	Sends	Delivery Rate	Open Rate	Click Rate
Welcome Email	46	97.83%	66.67%	22.22%
Week 1.2 - {{Name}} The coaches are on the scene!	67	95.52%	59.38%	15.63%
Week 2.1 - Are you feeling 😊, 😐 or 😞 ?	65	98.46%	53.13%	7.81%
Week 3.2 - Great work this week 😊	63	98.41%	4.84%	14.52%
Week 5.1 - Learn More about Respiratory Health 😊	27	100.00%	51.85%	7.41%

Summary: Symptom Tracker Data

The Health Storylines app enabled participants to not only track symptoms typically associated with asthma but also their mental symptoms which they could then discuss with their coaches.

The most reported symptoms such as wheezing, shortness of breath and runny nose are symptoms typically associated with asthma.

Wheezing
9.9%

Runny Nose
9.1%

Shortness of Breath
9.5%

Mental health experiences, specifically **fear and anxiety**, represented the highest severities of symptoms.

Study Conclusions

Intervention (Coaching/App) Experience

- Combination of coaching and the Health Storylines monitoring and disease management tools demonstrated directionally positive results based on participants' reported outcomes both from the structured and qualitative journals.

Experience

- We did not meet our acquisition and demographic targets for the intensive coaching program possibly due to the target demographics' lack of trust in the healthcare system and as such viewing a health coaching program to be untrustworthy.
 - During the national roll out, it could be beneficial to include more African American coaches with whom the participants can relate.
 - Given the diverse age group in the study, technological barriers may have influenced study outcomes.
- Though the majority of the participants struggled to control their asthma, the study shows that their asthma was moderate and as such we may have seen more dramatic results if the participants had more severe asthma

Psychosocial

- There are other factors that may have affected participant scoring on psychosocial questionnaire items, such as:
 - Participants had an average 2 comorbidities they were also managing. It is possible that this also affected their mental health.
 - During the duration of the study, the political and social climate was unstable due to the COVID-19 pandemic, strikes, elections, and more.

Quality of Life

- The patient profile for this study shows that on average participants reported their asthma control as medium/moderate.
- While these participants were still struggling to control their asthma, study outcomes may have differed if the cohort represented a wider range of participants who experience a higher severity of asthma.
- The coaching program along with participant self-monitoring had a positive effect on patients' quality of life. Lung function increased, quality of life increased and use of short acting beta agonists for quick relief of symptoms decreased.

To expand on the success of the pilot, Allergy & Asthma Network proposes to develop and disseminate a coordinated virtual and digital education program to reduce the prevalence and burden of COVID-19 while addressing vaccine hesitancy in communities of color. We will do this by collaborating with key partners who have deep roots in the Black and Latino communities and will base all approaches and materials on Allergy & Asthma Network's disparities survey and social listening. We will also conduct a literature review and landscape analysis to ensure there's no duplication of previous projects. We anticipate taking the Not One More Life Trusted Messengers program to at least 10 cities in 2021, including:

- Washington, DC
- New Orleans, LA
- Harlem/Bronx, NY
- Oakland, CA
- Kansas City, MO
- Nashville, TN
- Jackson, MS
- Chicago, IL
- Birmingham, AL





Allergy & Asthma Network brings a clear history of ensuring an effective, equitable and accountable response to COVID-19. Our combined understanding of the subject, along with our resources to reach both healthcare providers and patients with messaging about caring for communities of color, makes us ideally suited to this education program. We will continue to partner with the National Medical Association, National Hispanic Medical Association, National Black Clergy Initiative and the Black Coalition Against COVID-19 to disseminate our program.

We anticipate more than **20 Billion media impressions in 2021** with direct engagement of more than 1,000,000 people from communities of color. Furthermore, we aim to vaccinate more than 10,000 individuals and provide telehealth and digital health support to at least 1,000 high-risk patients.

Future for Asthma Management

The combination of virtual coaching and digital disease management may play vital role in the future of asthma management.



"I hope to get chosen to take part in this program. There's so much information out there for children and asthma. I was diagnosed as an adult and oftentimes you're treated like you should already know what to do. My 15-year-old cousin passed away in his sleep from asthma complications. We have got to do better with awareness and the seriousness of this disease. I know a lot but I can learn more."