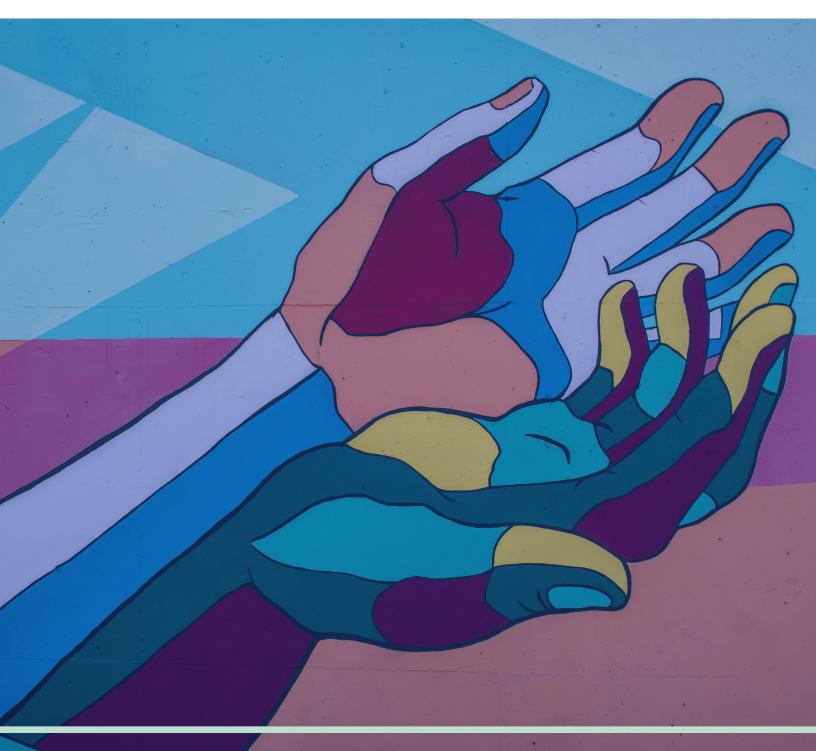
### Community Driven Innovation

Leveraging technology to make mental health services more accessible for Latinx Youth in New York City







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Typeset in Public Sans, with accents of Space Mono.

#### **Challenge Website**

https://www1.nyc.gov/html/nycx/mentalhealthchallenge/challenge

#### **Partners**



Front Cover Image: Tim Mossholder/Unsplash

Back Cover Image: Finn/Unsplash

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#### **Executive Summary**

The NYCx Co-Labs Accessible Mental Health Challenge set out to deploy real-world technology solutions in Northern Manhattan that addressed a key question: how might we improve mental health among Latinx youth (13-18 years old) in Inwood and Washington Heights? Through the program, NYC successfully launched two pilots even in the midst of the Covid-19 pandemic and a bevy of unique constraints.

At its core, NYCx Co-Labs is a replicable urban innovation model that identifies a critical, neighborhood-level issue and finds tech solutions to address it via funded pilots. It begins with a rigorous community engagement process to surface top-line issues facing the neighborhood. For this Co-Lab, this issue was mental health among Latinx youth. Youth mental health is a profound challenge in Inwood & Washington Heights with anxiety and depression as the main illness among community youth according to the NY Presbyterian Hospital. In the US, half of all mental health conditions start by age 14, and Latinx youth are particularly vulnerable due to social pressures, discrimination, and socio-economic stressors. The issue intensified during COVID-19 as economic insecurity increased.

After a competitive public application process, the NYCx Co-Labs team selected two novel solutions to pilot in the community: Me, Myself, and I ("MMI") & NextStep HealthTech ("NextStep"). MMI created a choose-your-own adventure, AI-powered comic chatbox, with characters reflective of the community itself, to take youth on an affirmative mental health journey. NextStep continued to build-out their app that leverages the gamified experience of popular social media platforms to empower users with increased resilience and connect them to health resources.

The Challenge unveiled crucial insights about what does (and doesn't) work in government innovation models. It helped agency partners understand more about piloting, scaling, and supporting vendors. But above all, it strengthened two powerful new tools that fostered enhanced mental health resilience in a vulnerable community. This report seeks to summarize the Challenge, meditate on key takeaways, and provide recommendations to improve upon similar endeavors in the future.

#### **NYCx Co-Labs Partners**

#### **Challenge Winners**

#### Next Step Health Tech

NextStep HealthTech is a mission-driven technology company that creates solutions to improve population health and social wellness. NextStep Health-Tech develops digital health services that feature user-friendly designs conducive to both self-led and supported health management.

The company focuses on modernization of health and educational systems, improving access to mental health resources, as well as resources to cultivate health literacy. NextStep HealthTech is committed to designing around human-centered empathetic principles to ensure positive user outcomes. Accessible support for mental health and substance use conditions is one of the primary drivers for Next-Step HealthTech, which bridges the chasm between those in need of support and support resources.

#### Me, Myself, & I

Me, Myself, & I is a comic book imprint that harnesses the power of sequential storytelling to jumpstart conversations about mental wellness among Black and Brown youth. Their goal is to remove the stigma of mental health in communities of color. They offer comics as a tool for Black and Brown youth to break down barriers around mental wellness, be it laugh out loud humor that makes you smile through your challenges or informative materials that help curb the epidemic rise of suicide among Black teens (74% increase since 1991). Me, Myself, & I helps by creating comics that address mental health and wellness.

#### **Community Partners**

The NYCx Co-Labs program engaged with 35 Inwood & Washington Heights community based-organizations, entrepreneurs, educators, and small businesses in a series of workshops on housing, education, health, arts & culture, economic development and immigrant affairs to identify community priority issues. The group became the Inwood and Washington Heights Community Technology Board, a full list of members can be found in the appendix section.



#### **Agency Partners**

# Mayor's Office of the Chief Technology Officer

Our mission is to ensure that technology is inclusive, accessible, human-centered, and works for all New Yorkers. We view technology as a critical tool for making New York City the fairest big city in America. Our work is organized around four pillars: Universal Broadband, ensuring high-quality, affordable internet for all New Yorkers; Inclusive Innovation, making New York City the place where new ideas are applied to improve lives; Digital Services, delivering government services online to make government work better for everyone; and Emerging Tech & Society; advancing laws, rules, and plans that promote the public good and protect New Yorkers' digital rights. Learn more at nyc.gov/cto.

Oscar Romero	Director of Inclusive Innovation & International Cooperation
Shanna Crumley	Senior Innovation Advisor
Ayesha Issadeen	Senior Advisor for Multimedia Design
Paola Sastre	MOCTO Fellow
Nicole Vogt	MOCTO Fellow
Larisa Lustik	MOCTO Fellow
Eduardo Valdez	MOCTO Fellow
Julianna Galvão	MOCTO Fellow
Liliana Avila	MOCTO Fellow
Michelle Meza	MOCTO Fellow
Jessica Copi	MOCTO Fellow
Julia Vieira de Andrade Dias	MOCTO Fellow
Elaine Mingsum Hsieh	MOCTO Fellow
Sara Sacks	MOCTO Fellow

# New York City Economic Development Corporation

NYCEDC works to make New York City's neighborhoods and economy stronger and more inclusive. We're working with and for communities, putting New Yorkers' needs before everything else. For us, economic development is about more than just the bottom line—it's about human impact. That's why we are investing in the jobs, industries, and communities that will drive New York's economic future and make our city stronger, safer, and more equitable.

Sander Dolder	Senior Vice President
Jonathan Lane	Assistant Vice President
Nicholas Kraus	Project Manager

# NYC Mayor's Office of Community Mental Health

The NYC Mayor's Office of Community Mental Health aims to ensure that every New Yorker who needs mental health support has access to it, where and when they need it. The NYC Mayor's Office of Community Mental Health addresses needs that have gone unmet by traditional services by piloting innovative strategies. This includes new services for historically underserved special populations, expanding the range of mental health support available to New Yorkers, and enhancing mental health equity across the city. The NYC Mayor's Office of Community Mental Health works with City agencies and strategic partners to achieve effective citywide implementation of strategies, maximize their effectiveness and ensure sustainability.

Sophie Pauze	Senior Director, Strategic Partnerships
Linda Tigani	Senior Director, Children, Youth & Families
Josephine Crisostomo	Program Manager, Strategic Partnerships

### **Acronyms**

B2B	Business to Business
DZD	Dusiliess to Dusiliess
B2C	Business to Consumer
СВО	Community-Based Organization
СТВ	Community Technology Board
DOITT	Department of Information, Technology & Telecommunications
HND	Heroes Next Door
MHSA	Mental Health Shortage Area
MMI	Me, Myself, & I
мосто	Mayor's Office of the Chief Technology Officer
NYCEDC	New York City Economic Development Corporation
ОСМН	Mayor's Office of Community Mental Health
PTA	Parent Teacher Association
SUD	Substance Use Disorder
YAC	Youth Advisory Council



[ ^ PHOTO] Community Tech Board at Building Community Power Through Creative Technologies in Inwood and Washington Heights, September 2018/Oscar Romero



#### Introduction

"Adolescence (10–19 years) is a unique and formative time. Multiple physical, emotional and social changes, including exposure to poverty, abuse, or violence, can make adolescents vulnerable to mental health problems.

Promoting psychological well-being and protecting adolescents from adverse experiences and risk factors that may impact their potential to thrive are critical for their well-being during adolescence and for their physical and mental health in adult-hood."

- World Health Organization<sup>1</sup>

Today's youth face multiple stressors that can affect their mental health, such as peer pressure, anxiety, increased use of technology, socio-economic problems, challenging home and family circumstances, and discrimination based on ethnicity, gender identity, language skills, nationality, among other factors.<sup>2</sup>

Youth around the world struggle with unreported mental health conditions, especially depression, and suicide is a leading cause of death among youth aged 10-18.<sup>3</sup> Meanwhile, research demonstrates that prevention and early intervention efforts can be effective in stopping mental health challenges from becoming crises.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> "Adolescent mental health," World Health Organization, last accessed October 23, 2019. http://bit.ly/2u6ELWg

<sup>&</sup>lt;sup>2</sup> "Adolescent mental health," World Health Organization, last accessed October 23, 2019. http://bit.ly/2u6ELWg

<sup>&</sup>lt;sup>3</sup> "Suicide." National Institute of Mental Health, U.S. Department of Health and Human Services (n.d.). <u>www.nimh.nih.gov/health/statistics/suicide.shtml</u>

<sup>&</sup>lt;sup>4</sup> Cho, Sun Mi, and Yun Mi Shin. "The Promotion of Mental Health and the Prevention of Mental Health Problems in Child and Adolescent." Korean Journal of Pediatrics, The Korean Pediatric Society, 2013. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3859877/">www.ncbi.nlm.nih.gov/pmc/articles/PMC3859877/</a>

In the United States, one out of four youth is Latinx, and they have been shown to face the highest levels of depressive and suicidal symptoms. Latina youth have the highest rates of suicide ideation and attempts among youth, yet they are far less likely than their peers to receive mental health treatment.

There has been a dramatic 56% increase in teen suicide in the United States between 2007 and 2017.7 Salud America found that Latinx youth may lack access to mental health care due to cultural differences related to mental health, language barriers, and mistrust of school and medical professionals. In addition, the National Council de la Raza found "a shortage of accessible, culturally appropriate mental and behavioral health programs and providers that can effectively screen, diagnose, and treat Latinos."

Furthermore, technology plays an important role in teens' lives-84% of teens in the U.S. have their own mobile phone, using them for gaming, watching videos and homework. Low-income teens are more likely to do homework on their phones, and use nearly two more hours of screen time daily than teens from higher-income homes. African-American and Latinx teens spend more time on social media than white teens, with teen girls spending the most time. Logical services are spending the most time.

Technology can be a useful tool to improve health, but it also presents risks. Scientists debate whether

there is a link between screen time and negative mental health, 11 and its effects on teens' communication, social interaction, and sleep are still being explored. 12 Nevertheless, researchers agree that technology and social media can be useful tools for communicating about mental health or providing mental health support, especially for reaching minority populations who are less likely to receive traditional mental health care. 13

It is an exciting time when researchers and entrepreneurs alike are exploring ways to apply technology to improving youth mental health.<sup>14</sup>

The NYCx Co-Labs: Accessible Mental Health Challenge created an opportunity for local and global entrepreneurs to change how local governments across the world and particularly the City of New York design and provide accessible mental health services for Latinx youth.

<sup>&</sup>lt;sup>5</sup> Patricia Foxen, "Mental Health Services for Latino Youth: Bridging Culture and Evidence," National Council de la Raza, last accessed December 20, 2016. <a href="http://publications.nclr.org/handle/123456789/1673">http://publications.nclr.org/handle/123456789/1673</a>

<sup>&</sup>lt;sup>6</sup> Ramirez, A et al., "Mental Health and Latino Kids: A Research Review," Salud America, 2016. <a href="https://salud-america.org/healthy-minds-research/">https://salud-america.org/healthy-minds-research/</a>

<sup>&</sup>lt;sup>7</sup> Brody, Jane E. "The Crisis in Youth Suicide." The New York Times. The New York Times, 2019. https://nyti.ms/2GK4xCp

<sup>&</sup>lt;sup>8</sup> Patricia Foxen, "Mental Health Services for Latino Youth.", 2016, Unidos US

<sup>&</sup>lt;sup>9</sup> "The Common Sense Census: Media Use by Tweens and Teens, 2019." Common Sense Media: Ratings, reviews, and advice, 2019. <a href="https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens-2019">https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens-2019</a>

Kamenetz, Anya. "It's A Smartphone Life: More Than Half Of U.S. Children Now Have One." NPR. NPR, 2019. <a href="https://n.pr/3aQ77Vk">https://n.pr/3aQ77Vk</a>

<sup>11</sup> Kamenetz, Anya. "The Scientific Debate Over Teens, Screens And Mental Health." NPR, 2019. https://n.pr/2uPzdzq

<sup>&</sup>lt;sup>12</sup> Brody, Jane E. "The Crisis in Youth Suicide." The New York Times, 2019. <a href="https://nyti.ms/2GK4xCp">https://nyti.ms/2GK4xCp</a>

<sup>13</sup> Ramos, Giovanni, and Denise Chavira. "Use of Technology to Provide Mental Health Care for Racial and Ethnic Minorities: Evidence, Promise, and Challenges." Cognitive and Behavioral Practice. Elsevier, 2019. https://www.sciencedirect.com/science/article/pii/S1077722919301063

<sup>14</sup> Boydell, Katherine M, et al. "Using Technology to Deliver Mental Health Services to Children and Youth: a Scoping Review." Journal of the Canadian Academy of Child and Adolescent Psychiatry. Canadian Academy of Child and Adolescent Psychiatry, 2014. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4032077/

# The NYCx Co-Labs Accessible Mental Health Challenge

NYCx Co-Labs is a civic innovation program managed by the NYC Mayor's Office of the Chief Technology Officer (MOCTO) and the NYC Economic Development Corporation (NYCEDC). The program combines community building, participatory research, tech education and open innovation challenges to address urban inequality across NYC neighborhoods.

NYCx Co-Labs brings together a set of partners — from government, local non-profit organizations, technology companies, communities, and foundations — through various events, workshops, and community spaces to accelerate the development of new tech-enabled solutions to NYC's most pressing issues.

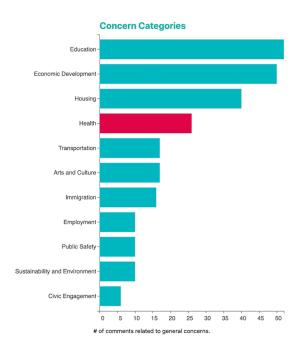
In each Co-Labs community, NYCx convenes a Community Technology Board (CTB) to serve in an advisory role throughout the process of developing the Co-Labs site, defining challenges that are a priority to community members, supporting the challenge competition and advising on pilot implementation.

Currently there are two active NYCx Co-Labs sites: one in Brownsville in Brooklyn, and one in Inwood & Washington Heights in Manhattan.

The NYC[x] Co-Labs: Accessible Mental Health Challenge emerged from a series of participatory workshops with community experts from Inwood and Washington Heights. In August 2018, NYCx Co-Labs engaged 35 Inwood/Washington Heights residents, representatives of community-based organizations, entrepreneurs and educators in a series of workshops on housing, education, health, arts & culture, small businesses, and immigrant affairs to identify priority issues in the community.

The outcomes of the first five issue area workshopsheld in September 2018–can be found in the report: Building Community Power through Creative Tech-

<u>nologies</u>. The community unanimously advocated to have another community workshop focused particularly on the needs of immigrant communities.



The results of the sixth workshop can be found in the report: <u>Building Community Power: Challenges</u> to Immigrant Communities.

This research was complemented with six one-on-one interviews with local healthcare professionals and stakeholders, 191 relevant data points from the OneNYC challenge survey, expert interviews, a literature review, and participatory workshops with NYC City agencies.

More information about the data collected from the community workshops can be accessed on the project's interactive data visualization page.

After extensive research and iteration with NYC City Agencies and the Community Technology Board, the NYCx Co-Labs Accessible Mental Health Challenge proposed the following question to its network of global innovators:

How might we improve mental health among Latinx youth (13-18 years old) in Inwood and Washington Heights?

To learn more about the challenge design, selection process, selection criteria, see the NYCx Co-Labs Accessible Mental Health Challenge Manual.

#### Purpose of the challenge

Half of all mental health conditions start by 14 years of age, yet most cases go undetected and untreated. In the United States, Latinx youth are particularly vulnerable to mental illness due to social pressures, discrimination, and socio-economic stressors. 16

Latinx youth in New York City are no exception. Inwood and Washington Heights, the traditional enclave of the Dominican-American community in New York City (NYC), have a population of over 210,000 residents. The area has the largest concentration of children and youth in Manhattan with over 35,000 residents between the ages of 5 and 19 years old.

Inwood and Washington Heights community leaders are concerned about the prevalence of mental health stressors in their neighborhoods, especially fears about housing insecurity, immigration status and deportation, which can prevent people from seeking out health and city services.<sup>17</sup>

Meanwhile, Latinx youth nationwide struggle with academic pressure, depression, anxiety, low self-esteem, and suicidal ideation, with a recent rise in self-destructive behavior among young Latinas.<sup>18</sup>

Kessler RC, Angermeyer M, Anthony JC, et al. "Lifetime Prevalence and Age-of-Onset Distributions of Mental Disorders in the World Health Organization's World Mental Health Survey Initiative." World Psychiatry 6, no. 3, 2007, 168–76.

Ramirez, Amelie. "Mental Health & Latino Kids: A Research Review." Salud America, December 10, 2018. https://salud-america.org/healthy-minds-research/

<sup>17</sup> As reported to NYCx Co-Labs during community listening sessions

<sup>18</sup> Ramirez, Amelie. "Mental Health & Latino Kids: A Research Review." Salud America, December 10, 2018. <a href="https://salud-america.org/healthy-minds-research/">https://salud-america.org/healthy-minds-research/</a>

Research has robustly and consistently shown that identities with a history of oppression – such as people of color and LGBTQI individuals, among others – experience increased negative mental health symptoms related to discrimination and harassment.<sup>19</sup>

In that context, the City of New York called for innovative projects, services or products to improve mental health and well-being among Latinx youth.

Solutions were required to include engaging, actionable mental health tools and resources to help Latinx youth in Inwood and Washington Heights understand mental health and mental illness, learn how to seek help when needed, engage in behaviors that promote positive mental health, and reduce community stigma in the pursuit of information about mental health and appropriate services.

Solutions were required to address the needs of either Latinx youth themselves, mental health service providers in the area, or organizations that provide mental health education and services. The City encouraged projects that address the language barriers and cultural differences associated with the largely Spanish-speaking, foreign-born population in Inwood and Washington Heights.

Since the Challenge was issued, COVID-19 has exacerbated longstanding mental health needs and disparities, including for Latinx communities.<sup>20</sup>

# The City's Vision on Mental Health for All

The Mayor's Office of Community Mental Health (OCMH) promotes mental health for all New Yorkers by closing critical gaps in mental health support. In partnerships with 13 City agencies and hundreds of community partners, OCMH oversees dozens of innovative programs that serve hundreds of thousands of New Yorkers every year. The Mayor's Office of Community Mental Health programs reach people with the highest need – those with serious mental illness, those affected by trauma, and those living in historically underserved neighborhoods. The Mayor's Office of Community Mental Health programs take down barriers to care for all New Yorkers by providing free services in over 200 languages, regardless of insurance or immigration status. The Mayor's Office of Community Mental Health is working toward a New York City where every New Yorker in need is connected to care and mental health needs do not become crises.

The NYCx Co-Labs: Accessible Mental Health Challenge is part of the inclusive innovation efforts of the City of New York to connect the NYC tech ecosystem, government agencies, local communities, mental health experts, and global innovators to address the mental health needs of our most vulnerable communities.

<sup>19</sup> Russinova, Zlatka, Shanta Griffin, Philippe Bloch, Nancy J. Wewiorski, and Ilina Rosoklija. "Workplace Prejudice and Discrimination toward Individuals with Mental Illnesses." Journal of Vocational Rehabilitation 35, no. 3, 2011, 227–41. <a href="https://doi.org/10.3233/jvr-2011-0574">https://doi.org/10.3233/jvr-2011-0574</a>

<sup>&</sup>lt;sup>20</sup> See the "Double Jeopardy: COVID-19 and Behavioral Health Disparities for Black and Latino Communities in the U.S." policy brief by Substance Abuse and Mental Health Service Administration available at: <a href="https://www.samhsa.gov/sites/default/files/covid19-behavio-ral-health-disparities-black-latino-communities.pdf">https://www.samhsa.gov/sites/default/files/covid19-behavio-ral-health-disparities-black-latino-communities.pdf</a>

#### **Key Challenge Indicators**

Estimated population Inwood & Washington Heights

219,657

Percent of population that is foreign-born

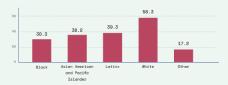
46.3%

Median Household Income<sup>21</sup>

\$52,051

Black, Latinx and Asian Amercian and Pacific Islander
New Yokers are less likely to be connected to mental
healthcare than White New Yorkers

Percentage of those with depression who self-report receiving mental health treatment, by race/ethnicity



Adults with current depression who received mental healthcare in the prior 12 months. Age-adjusted prevlance per 100,000 residents (2017).

Among youth with mental health needs, males are less likely to be connected to mental healthcare across all races and ethnicities.

Percentage of youth with mental health needs who self-report connection to care, by race/ethnicity



High school students who got help from a professional counselor, social worker, or therapist for an emotional or personal issue in the last 12 months. Weighted population percent of New York City high school students (2017).

1 in 2 of all mental health conditions start at the age of 14 years, yet most cases go undetected and untreated.

Latino students in the U.S. reported feelings of hopelessness and sadness

32.6%

Percentage of Latinas in grades 9-12 who self-report suicide ideation

25.6%

Percentage of depression cases treated by the New York-Presbyterian/Columbia University Medical Center in 2016.

66%

Number of residents between age 5-19

35,000 (15%)

Population without medical insurance

14%

<sup>21</sup> The median household income in Inwood and Washington Heights is \$52,051, which is below both the borough-wide median of about \$82,500 and the city-wide median of approximately \$61,000. The majority of residents are defined as extremely low-, very low-, or low-income, meaning they make less than 80% of the Area Median Income for the NYC metropolitan area.





# Thank you!

COVID-19 Guide to Mental Health Resources for Children, Teens & Young Adults



This guide includes high-quality mental health information and services that can help. All resources in this guide are free and accessible by phone, text or online.





This guide contains mental health services from City agencies, including schools, available during the COVID-19 pandemic for people from birth to age 24.

#### **Challenges of Covid-19 for**

#### **Mental Health in NYC**

The COVID-19 public health emergency further accelerated youth mental health concerns locally and nationally. COVID-19 disruptions-such as changes to routine, loss and grief, isolation and lack of peer interaction, disconnection from typical activities, and/or family tensions in close quarters - can all lead to new or heightened mental health challenges.

In New York City, Inwood/Washington Heights is one of the areas that has been hardest-hit by the pandemic,<sup>22</sup> compounding a high percentage of health and socioeconomic disparities that already existed. Above average rates of infection in the community may lead to significant emotional distress brought about by the death of loved ones; bereavement is associated with challenges connecting with others, accepting the loss, dealing with change, imagining a hopeful future, and guilt. For young people, these experiences may be further aggravated by social isolation and physical disconnection from typical sources of support like school, friends and extracurricular activities; interrupted grieving processes; loss of income; and family instability. Experiencing each of these components of bereavement is associated with poor quality of life, worse mental health, and increased likelihood of meeting criteria for a mental disorder.23

Surveys conducted by Mental Health America<sup>24</sup> indicate that the stressors brought by the COVID-19 pandemic have led to significant increases in emotional distress among young people nationwide – as compared to Americans in other age groups, young people are struggling the most with their mental health. Based on screening in 2020 and 2021, young people aged 11-17 are experiencing moderate to severe symptoms of anxiety and depression at higher rates than other age groups, and at a rate 9% higher than the average among young people in 2019. Furthermore, nearly 50% of young people aged 11-17 reporting having thoughts of suicide or self-harm more than half or nearly every day of the previous two weeks.

At the time of publication, the COVID-19 pandemic persists, and the need for localized and accessible mental health support for young people remains more important than ever.

[ < PHOTO] Mental Health Youth Listening Session with Congressman Adriano Espaillat, and Assembly Member Carmen De La Rosa, May 2020.

<sup>&</sup>lt;sup>22</sup> Neon, COVID-Neighborhoods. Web. Accessed August 21, 2021.

<sup>&</sup>lt;sup>23</sup> Trevino, K. M., Litz, B., Papa, A., Maciejewski, P. K., Lichtenthal, W., Healy, C., & Prigerson, H. G. (2018). Bereavement challenges and their relationship to physical and psychological adjustment to loss. Journal of palliative medicine, 21(4), 479-488.

Mental Health America, Spotlight 2021: COVID-19 and Mental Health, Web. Accessed August 31, 2021. https://mhanational.org/sites/default/files/Spotlight%202021%20-%20COVID-19%20and%20Mental%20Health.pdf









KASE & MARI DISCUSS HOW HER ANXIETY/GATS BEBAN.

FLATIBACK
HOW MARI GOT
HER OFT POWERS.

KASE CONFIRMS MAH'S ANXIETY NEWS OF ATTACKON SENIOR COMMUNIM.

#### **CASE STUDY 1**

# Me, Myself, & I



#### About Me, Myself, & I

As one of two NYCx Co-Labs Challenge winners in 2020, Me, Myself, & I (MMI)—a NYC-based startup social enterprise—has developed an innovative pilot project called Heroes Next Door (HND).

Me, Myself, & I is an NYC-based psychoeducation company that leverages the power of sequential storytelling to jumpstart meaningful conversations about mental wellness among Black and Brown youth. Its immediate goal is to alleviate the stigma of mental health in communities of color. It also strives to point towards pathways for Black and Brown young people to connect with accessible community-based mental health resources.

Heroes Next Door is the bilingual, interactive comic book currently in development as a creative tech response to NYCx Co-Labs Accessible Mental Health Challenge. It will soon be marketed and made available free of charge to Latinx young people in the Washington Heights and Inwood neighborhoods of Upper Manhattan and, eventually, beyond. In many respects, the MMI bilingual, interactive comic book follows the contemporary tradition of leveraging comic books and other forms of sequential storytelling to accomplish social and public health goals.

To accomplish this goal despite formidable technical and engagement challenges, the MMI team has settled on an affordable and accessible solution that also is easy to scale. At the time of publication, the team is building the interactive comic book—with all its complex features, including a user survey embedded as gameplay—on a Facebook Messenger chatbot platform.

#### **Pilot Theory of Change**

As the MMI team began its own investigations to supplement the Co-Labs data and to develop its project-based theory of change, they embraced, first of all, a common sense approach to destignatizing the discussion of mental health in the Latinx communities of Washington Heights and Inwood that derived from their experiences in the community.

The MMI team also drew upon two key approaches drawn from mental health literature, Social Learning Theory & Resilience Theory, as well as their own experiences working with children and youth.

- Social Learning Theory asserts that human beings learn by observing the behaviors of others (models) and evaluating the effect of those behaviors by observing the positive and negative consequences that follow.
- Resilience Theory describes resilience as the ability to grow and function despite repeated exposure to adversity, stressors, misfortune, or systemic injustice. Protective factors and character strengths each help to foster resilience the ability to rise above adversity.

#### **Pilot Timeline**

Design & Implementation	January - December 2021
Implementation timeline	Spring 2022
Funding Provided	\$20,000 USD
Original stage of initiative	Idea stage

#### **High-level Output & Outcome indicators**

Deliverable	Description	Output Indicator	
Industry Engagement	MMI engaged with industry experts in creative production	# of industry experts engaged for product development	7
Community Engagement	MMI engaged with community based organizations in Inwood and Washington Heights to gain insights for the development of heroes next door	# of organizations engaged	38
Government Engagement	Advisory sessions with government partners	# of support strategy & planning sessions	24
Youth Advisory	MMI created an Inwood & Washing- ton Heights Youth Advisory Council	# of members of the Youth Advisory Council	7
MMI surveyed or outside the Inwo		# of workshops facilitated with youth for character development and storyline development	4
		# of youth that were interested in mentorship and were connected with mentors	3
	MMI surveyed other latinx youth outside the Inwood and Washington Heights community to expand us-	# of surveys	2
	er-research insights	# of responses	73
Character and sto-	Characters and storylines were developed in partnership with the Youth Advisory Council	# of characters developed	3
ryline development		# of storylines developed	3
Actionable Mental Health Skills Introduced	Storylines will introduce mental health concepts and examples of the application of skills	# of MH practices incorporated <sup>25</sup>	7

Outcome Categories	Expected Outcome Statements <sup>26</sup>
Reduce stigmas associated with mental health and mental illness	To reduce mental health stigma among youth by helping young people attain more in-depth levels of awareness, education, and comprehension about taking care of their mental health
Increase the amount of culturally relevant content tailored to Latinx youth to support mental health	Latinx Youth are engaged in the design of the comic, the story lines, and Psychoeducational content to make it culturally relevant, accessible, and community specific

The mental wellness skills that likely will be introduced include breathing, mindfulness, self-awareness tools, use of social support networks to connect with others in difficult times, awareness of symptoms and common reactions to stress, and ways to connect with various available supports.

Over the pilot period, MMI has focused on the development of the interactive comic; the proper method to measure outcome indicators will be defined, collected, and evaluated once all of the calls to action are incorporated into the beta version of the comic.

#### Co-Design Process

MMI's co-design process for "Heroes Next Door" involved outreach to develop a network of participants, both youth and adults within the community, to help ensure the product experience aligns with the expressed needs of the Latinx community. MMI incorporated data from its City partners about the mental health needs of young people living in the Washington Heights and Inwood neighborhoods with its own follow-up research to assess the target audience's motivations, needs, and habits.

One of the key successes during this process was the development and engagement of a Youth Advisory Council (YAC). The MMI Youth Advisory Council (YAC) was established to proactively incorporate youth voices and help build the capacity of youth participants in the Heroes Next Door project. Youth were recruited from community-based organizations serving the Washington Heights and Inwood neighborhoods.

In turn, the MMI project team was able to provide young people the opportunity to directly support the Heroes Next Door project's development, outputs, and outcomes in ways that contribute to its scale and sustainability. These activities also helped build up the skills of young people themselves by offering them the opportunity to talk with expert professionals about their fields of interest, including product design, artificial intelligence, chatbot development, and mental health.

MMI also obtained valuable quantitative and qualitative data by conducting Zoom meetings and online Google surveys with the YAC and Community Advisors. The YAC's feedback was a pivotal component of this process, as they provided valuable data and cultural preferences which helped MMI determine the comic book's style, content, fashion look, and creative direction.

#### Teen Engagement Lessons Learned

- Teens were more responsive to outreach when they were checking email regularly and had more consistent schedules.
- Text, not email, is most effective for brief responses from teens. Conference calls/meetings should be reserved for deeper conversations.
- Because of over-surveying, commitments and school workloads, teens should be given some incentives or "perks" in appreciation of their collaboration. This can include stipends, resume support, connections with professionals, etc.

The inability to engage youth in person due to COVID-19 made the collaboration more challenging.. The unspoken message was that both community partners and youth were burned out on too many remote meetings and Zoom conversations.

#### Pilot Deployment

The beta release of the Heroes Next Door interactive comic book will take place during the first half of 2022.

#### Findings and Analysis

During 2022, MMI will be able to analyze post-launch data on the success of its HND marketing campaign. It also will be able to closely examine digital indicators around usage, learning, and the response of Latinx youth. Some of the data to be collected will include the number of active users, length of engagement/retention, and the number of users who opt into learning more about the concepts/skills/tools that have been introduced throughout the story. This data likely will be collected over eight to nine months, depending on the overall success of the HND marketing campaign.

# Lessons Learned & Recommendations from MMI

The onset of the COVID-19 pandemic in winter 2020 created unforeseen hurdles, which produced many of the challenges described below:

The City of New York should commit to a three-year \$250K annual budget allocation to develop and implement interactive comics media as an important outreach strategy to support mental and emotional well-being among historically underserved Latinx young people in targeted NYC neighborhoods. The MMI team proposes that the City allocate \$250k annually in its public budget to develop and implement comic media — digital and print — as an essential outreach strategy to support mental and emotional well-being among at-risk youth — particularly Latinx, Black and Brown young people — who live in NYC neighborhoods.

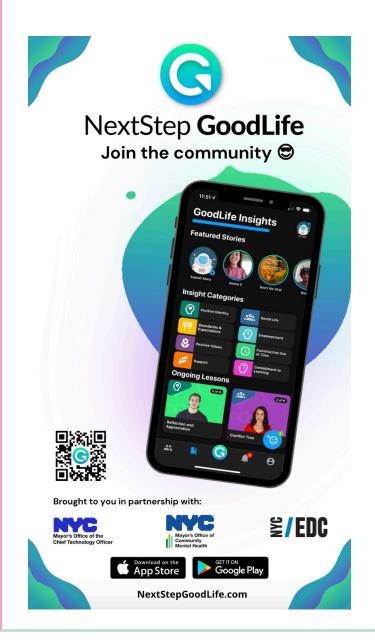
Wherever it might be helpful, and especially for innovative Challenge competitions, the City should provide technical assistance and other resources to assist small companies with managing their project timelines. Having the City provide even a part-time technical assistance consultant who could act as a production/timeline advisor for pilot projects would help smaller startups with the management of their production timelines, thereby avoiding scope creep and accelerating pilot deployment.

Release public funds for start-up projects in a timely manner. Innovative start-ups such as MMI often do not have the cash flow to pay in advance for asset development. This was a major challenge for MMI that delayed our anticipated timeline. These delays led to unfortunate ripple effects: Youth advisors became disengaged and the availability of sought-after creative contributors shifted.

Where feasible, designate a specific contact or liaison at key public agencies and community-based organizations in order to help facilitate community partnerships. Government influence clearly helps in building community partnerships and marketing. Community-based organizations were more responsive when government agencies made introductions and added to our outreach with follow-up emails. The City government's access to outreach channels, social media, etc. helped the team spread the word about the project for launch with potential partners.

#### **CASE STUDY 2**

# NextStep HealthTech



#### About NextStep HealthTech

NextStep HealthTech is a mission-driven technology company that creates solutions to improve population health and social resilience for individuals and communities. NextStep HealthTech develops digital health services that feature user-friendly design conducive to both self-led and supported behavioral health management.

NextStep GoodLife was originally commissioned by the New Hampshire Department of Education as an evidence-based youth resilience cultivation and substance misuse prevention platform. NextStep GoodLife is packaged as a positivity-based social media-style platform and helps youth ages 12-18 access linguistically and culturally competent local and virtual mental health resources.

NextStep GoodLife has a proprietary analytics system that provides insights regarding population resilience for communities, schools, and neighborhoods within a locale, as well as a city as a whole. The insights and sentiment analytics can help to identify specific resources to allocate to a given school, community, or neighborhood with quantified metrics about population resilience and mental health.

#### **Pilot Theory of Change**

NextStep's theory of change is to connect people in need, their loved ones, and caregivers to behavioral health and resilience-cultivation resources to prevent and mitigate mental health conditions and substance use disorder (SUD). NextStep's products are designed and developed using human-centered, linguistically and culturally competent, and positive behavioral change methodologies for ease-of-use and accessibility for many diverse audiences. The NextStep GoodLife smartphone and web platform provide Latinx youth with mental health resilience resources using applied, clinically validated, evidence-based social emotional learning research.

#### **Pilot Timeline**

Design & Implementation	January - December 2021	
Funding Provided	\$20,000 USD	
Original stage of initiative	Existing Product & Service	

#### **High-level Output & Outcome indicators**

Deliverable	Description	Output Indicator	
Engagement of Local Educators	NextStep conducted informational interviews and product demonstrations for educators and school administrators, including guidance counselors, school social workers, principals, parent coordinators, and PTA groups	# of informal sessions	24
Government Engagement	Advisory sessions with government partners	# of support strategy & planning sessions	35
Collaboration with Local Organizations	Collaborate, customize and co-design with Schools, CBOs and local organizations.	# of educational institutions <sup>27</sup>	7
		Range of engagements <sup>28</sup> required to build trust with each partner	3-7
		Range of weeks required from org intro to student onboarding per partner	3-12
		# Community Based Organizations <sup>29</sup>	7
Youth Engagement	Youth Engagement  Obtaining buy-in from high school administrators to present NextStep to youth	# onboarding presentations with youth through high schools	3
		# youth in the platform from Inwood and Washington Heights	48
Platform	NextStep customized the platform	# of community pages created in the app	18
customization	to address the needs of Inwood and Washington Heights Youth	# functionalities added to original product <sup>30</sup>	5
	Creation of an entire new web based application of the GoodLife platform	# new products created <sup>31</sup>	1

<sup>&</sup>lt;sup>27</sup> The College Academy, Amistad School M.S. 328 Community Math & Science Prep., H.S. 468 for Health Careers & Sciences, Inwood Academy, The Equity Project (TEP) Charter School, and H.S. of Law & Public Service.

Each partner would require approximately between 4-5 introductory email exchanges, two introductory phone calls, two demos, until student onboarding was possible.

<sup>&</sup>lt;sup>29</sup> Police Athletic League, New York Presbyterian Center for Community Health and Education, The JED Foundation, Bring Change 2 Mind and Northern Manhattan Improvement Corporation (NMIC)

<sup>&</sup>lt;sup>30</sup> 1) Creation of a section on each community page to allow local CBOs to list their own resources; 2) Improvement to analytics dashboard to make reporting more useful for governments and schools; 3) Improvements to the Terms of Reference to comply with the NYC Department of Information Technology and Telecommunication. 4) Creation of the https://nextstep.health/helpful-resources section with mental health resources for youth. 5) creation of Organization/Management functionality for CBOs.

<sup>31</sup> See web-based platform at mobile.nextstepgoodlife.com

Outcome Categories	<b>Expected Outcome Statements</b>	Indicator	
Increase the amount of culturally relevant content tailored to Latinx	Increased youth skills to deal with mental health challenges via culturally competent short video training	# of stories created by youth in Inwood and Washington Heights	6
youth to support mental health		# of stories created by CBOs in Inwood and Washington Heights	9
		# of stories created as a result of this pilot outside NYC	9
		# of all stories created in the plat- form during the pilot-period	116
Raise the level of community awareness of available formal and informal MH services	Increased the ability of youth to navigate mental health resources in their community <sup>32</sup>	# of assets in the NYC Health Care Map	3,000
Increase Latinx youths' confidence in using and seeking formal and informal MH services	Increased health seeking behavior among latinx youth.	% of NYC share of global platform health seeking behaviours identi- fied during pilot period	36.12%

#### Co-Design Process

NextStep conducted dozens of interviews with local stakeholders, including educators, school administrators, guidance counselors, school social workers, parent coordinators, and charter school staff; community-based organizations (CBOs) that provide teen and youth programming; City agencies; and entities that provide clinical health and social services to youth to further narrow the focus of the pilot's goals to build awareness and scale access to existing behavioral health resources within the community and customize the NextStep GoodLife platform with culturally and linguistically competent content.

NextStep also met regularly with its partners at OCMH, MOCTO, and NYCEDC to discuss milestones, hurdles, and successes it encountered in promoting awareness of its SUD prevention platform and youth behavioral health tools and resources available via the NextStep GoodLife and NextStep.Health platforms.

Additionally, the NextStep team worked closely with MOCTO to develop a monitoring and evaluation framework. MOCTO's "hands-on" approach helped to focus NextStep's strategy in reaching the pilot's target objectives and provided additional support in light of the many unforeseen challenges, particularly those related to the COVID-19 pandemic.

The NextStep.Health Care Map available at <a href="https://nextstep.health/care-map">https://nextstep.health/care-map</a>.

#### **Pilot Deployment**

From February-March 2021, NextStep launched its grassroots outreach initiative to engage the stakeholders identified above. Outreach was conducted via telephone and email to reduce the spread of COVID-19.

Several months elapsed until NextStep began receiving responses to its correspondence. Initially, the deployment of a behavioral health ecosystem via a tech-enabled social platform was met with skepticism. Over time, dissemination of informational materials and many touchpoints, relationships began to form, and more and more community stakeholders came to view the offerings of NextStep's platforms as an invaluable resource and novel way to reach youth in a familiar smartphone application setting.



NextStep worked collaboratively with various schools (including The College Academy, Amistad School M.S. 328 Community Math & Science Prep., H.S. 468 for Health Careers & Sciences, Inwood Academy, The Equity Project (TEP) Charter School, and H.S. of Law & Public Service) and CBOs in Inwood and Washington Heights (including Police Athletic League, New York Presbyterian Center for Community Health and Education, and Northern Manhattan Improvement Corporation (NMIC)) and foundations (The JED Foundation, Bring Change 2 Mind) ) throughout the pilot period to identify ways the NextStep GoodLife platform can address each school's and organization's unique concerns, acute needs, and long-term objectives in the context of students' mental health.

Prior to top-down introductions from city agency partners, NextStep typically made repeated and time-consuming outreach efforts; numerous stakeholders indicated they initially perceived communication from NextStep as "spam" or unsolicited sales calls. In many cases, it took several weeks or even months to reach an appropriate point of contact within an organization and then develop relationships and trust with a community stakeholder. At the onset, many appeared to be resistant to technology-based solutions until learning more about the offerings of NextStep's platform.

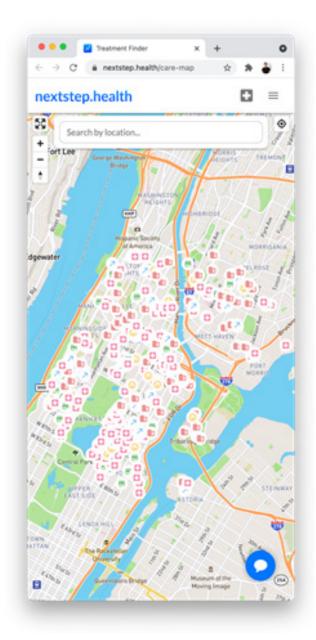
## Customization to be responsive to local experiences

Customization for the NextStep GoodLife and Next-Step.Health platforms was derived from the conversations NextStep had with different school personnel and leadership to conceptualize features and functionality which they perceived as being of high value to their students and their schools.

#### Customization included:

 Creation of eighteen (18) Community Pages to demonstrate the ease of use and the value for local schools, local students, and local organizations:

- Creation of a new section on each Community Page which allows organizations to list their own resources, like phone numbers and website links;
- Creation of a new section on each Community Page that allows organizations to list their partnered communities (e.g. a Bring Change 2 Mind (BC2M) National Organization parent Community Page + BC2M-NYC local chapters);
- Refinement of the analytics dashboard to allow for custom queries of the NextStep GoodLife Platform Analytics for stakeholders, making data reporting easier and providing more value to a school or government agency.
- Inclusion of additional privacy safeguards for end-users through global updates to the platform's functionality and Terms of Use, pursuant to input from the NYC Department of Information Technology and Telecommunications (DOITT) legal departments; and
- Creation of a novel web application to expand the accessibility of the GoodLife platform (mobile. nextstep goodlife.com) in response to feedback from schools that expressed a desire that students without access to a smartphone be able to interact with the GoodLife platform via a school computer or tablet.



#### **Content Creation**

NextStep created content in-house and also sourced and populated the platform with content from local CBOs:

- 9 stories added to CBOs' Community Pages, including content identified for CommuniLife, The Armory, The Equity Project Charter School, Police Athletic League;
- 6 Stories were created by users from NYC including local artists and mental health advocates, and Youth Advisory Board content creators;

- 9 other notable stories were created outside the NYC community, including 1 from a well-known artist in Los Angeles, California; 1 student in Franklin County, Massachusetts; 3 stories from Choose Love Movement (founded by Scarlet Lewis in honor of the memory of her son, Jesse Lewis, who was murdered in the Sandy Hook shooting); and 5 additional submissions; and
- 113 new stories were added to the GoodLife Platform within the pilot period.

Customization for the NextStep.Health platform also included adding additional resources to the care finder map and ensuring the platform was useful to the local community:

- Creation of the https://nextstep.health/helpful-resources page to provide users with information about additional resources for mental health support;
- Design and implementation of an "Organization/Management" portal that allows CBOs to access digital health clinic infrastructure and serve their clients (from feedback sourced from conversations with a local CBO). This portal can be used to create NextStep.Health provider accounts, view performance metrics for providers, and manage multiple offices;
- Optimization of the NextStep.Health Care Map (https://nextstep.health/care-map) for the NYC area, which currently includes approximately 3,000 resources city-wide;
- Modification of the platform pursuant to the requirements of the NYC DOITT legal department by updating global functionality for platforms, including explicit notice when an end-user is navigating away from the platform Care-Map to a third-party resource, such as a local pharmacy or mental healthcare facility's web page;
- Implementation of a health insurance reimbursement API (Application Program Interface) that enables providers within the NextStep.Health platform to submit claims to Medicare, Medic-

- aid, and private payers for services provided via the platform; and
- Redesign of existing asynchronous education modules within the platform to enhance accessibility, ease of use, and interactivity. As part of this redesign, a module creation portal was introduced as an option for a CBO (or school) to create their own content within NextStep.Health

#### **Findings and Analysis**

Student adoption was the primary goal of the pilot and the limited number of opportunities NextStep had to engage directly with youth prevented high levels of adoption given the amount of time. On a positive note, the few opportunities where Next-Step was afforded these opportunities, namely the on-boarding presentations and Youth Mental Health Listening Session, resulted in a high proportion of adoption and subsequent platform engagement. Of all in-App help-seeking behaviors in Q3 2021, 36.12% were from users based in NYC, substantiating the need for resources like NextStep GoodLife in these communities.

Of the 24 CBOs engaged by the NextStep team throughout the course of the pilot, seven were interested in taking part in the initiative. NextStep was able to meaningfully engage seven middle and high schools in the Inwood & Washington Heights neighborhoods, as well as approximately two dozen personnel (guidance counselors, parent coordinators) from other area schools. At the time of this report, NextStep has tallied approximately four dozen engaged youth in Washington Heights and Inwood.

NextStep participated in four virtual community events, including Webinars where youth mental health was discussed or the topic of focus. The NextStep team was also able to engage other City partners, including the New York City Public Library system, and interviewed researchers at academic institutions, including Columbia University's Mailman School of Public Health.

# Lessons Learned & Recommendations from NextStep

The onset of the COVID-19 pandemic in winter 2020 created significant unforeseen hurdles, which may have aggravated some of the challenges and associated recommendations described below:

Government should have an active role in building community partnerships: Community Based Organizations were more responsive when government agencies made introductions and supported us with follow-up emails.

Governments should take a proactive role in addressing youth mental health: Funding and promoting tools and resources to citizens will mitigate downstream costs and other public health issues.

Departments of Education must also think seriously about providing mental and behavioral health-care resources to students: Providing universal access to uniform resources can help to mitigate inequities in communities (and countries) where students do not have access or where access is cost-prohibitive.

City initiatives should incorporate top-down promotion and validation to expedite stakeholder adoption: Significant delays occurred as a result of stakeholder skepticism and independent vetting of NextStep's platforms despite NextStep having already been vetted by the City government.

Government should expedite its process for contracting with Startups: Delays in the contract negotiation process posed unnecessary and avoidable obstacles for both NextStep and City partners during the pilot.

Government should prioritize legal review and payment prior to the start of pilots like these: Delays in legal approval and payment provided additional challenges that could have been avoided.

Pilot timelines should remain flexible and be modified in accordance with unforeseen challenges: The shutdowns and other impacts of the COVID-19 pandemic posed significant and unforeseen challenges in community engagement, frustrating initial timelines.

Mission-aligned CBOs may have competing interests with initiatives that seek to incorporate innovative solutions from the private sector: Wherever possible, further details relating to a particular CBO's funding sources should be ascertained before any attempts to engage them are made. Any assumptions about an organization's priorities should be avoided.



# NYCx Co-Labs Lessons Learned & Policy Recommendations

#### Lessons Learned

#### **Urban Innovation in NYC**

Since 2015, NYCx Co-Labs has served to design, test and iterate collaboration frameworks for New York City Government agencies to put new and emerging technologies to the service of all New Yorkers. Rather than proposing a particular agenda, the NYCx Co-Labs framework has always been tech-agnostic, problem-centric, community-driven and collaborative.

The following lessons offer insights for public servants in the civic tech space who aim to address urban development challenges through collaborative multidisciplinary partnerships with community members and government agencies.

# From Community Engagement to Participatory Design<sup>33</sup>

Communities know what they need. Community engagement efforts should go beyond simply documenting concerns, and should provide community members the opportunity to qualify the level of urgency of the issues they share.

Youth mental health was a top, urgent priority expressed during the Inwood community workshops, as well as documented in research and the Community Board-12 needs assessments. Having mecha-

nisms for the community to constantly qualify priority issues allowed us to build consensus and support among advocates, and agencies. The Co-Labs program elevated that community-set priority at every level for approvals. In hindsight, the challenge put youth mental health front and center right in the midst of the pandemic's mental health crisis.

How you document civic engagement matters. Traditional community engagement efforts rely on note takers to document the outcomes of town halls, interviews and workshops. Creating thoughtful documentation frameworks to collect information is as important as what gets to be documented. The NYCx Co-Labs team classified community feedback into: solutions, problems, concerns and resources.

Communities have resources. Know them. Communities constantly create strategies to address the issues they encounter. They organize and develop community support networks, initiatives and services. Creating strategies to document such resources allows government agencies to empower ongoing efforts and nourish community networks. We classified community assets as follows: Access to people, access to places, expertise, and other resources.

Engaging with the government is everybody's right, but inequality makes it a privilege. Engaging with the government in addressing local challenges is the right of all the people who live in NYC. However, not all New Yorkers have the same ability to invest time in talking to government entities. In the context of vulnerable communities, this is even more evident. It is important to implement complementary civic engagement strategies that account for this reality. For this challenge, government agencies engaged in a combination of person-to-person surveys, community open sessions, events, and participatory community workshops.

Government agencies must meet communities where they are. When participating in civic engagement activities, community members come to the table with anger, deep sadness, confusion, and distress, which are all legitimate expressions of communities' reality in engaging with the government. Civic engagement efforts should be designed to

operate in the context of deeply personal and difficult emotions that may affect communication. This is particularly vital in the context of vulnerable and marginalized communities that have historically suffered in the face of government (in)action.

Community partnerships require trust. Trust comes with transparency, accountability and collaboration. Community partnerships are critical for the success of any social and economic development initiatives. Public servants are discouraged to pursue civic engagement when they lack resources, regulatory powers, or authority over a particular issue area. In the context of these pilots, well documented community input served as a backbone for coalition building, which empowered both community members and city agencies to effectively advocate for resources.

Civic Engagement should be a permanent feature rather than a phase of initiatives. Rather than looking at civic engagement as a phase of a process, we found through this experience that civic engagement as a continuum increases trust among community members as well as opportunities for pilots to be successful.

To improve civic engagement, government agencies should constantly iterate in their processes and provide training opportunities for staff. Not all public servants work on civic engagement, but all public service could be improved with thoughtful, diverse, and constant community input.

#### Global Partnerships to Address Local Challenges

Well documented research makes the difference between isolated initiatives and long-term planning. The challenge manual produced for this challenge fulfills three roles: 1) Provides an overview of the community context; 2) Maps out community challenges in the context of mental health services for youth that could be addressed through technology and innovation; and 3) Provides definitions anchored in NYC health system. Regardless of the outcomes of the two pilots that this partnership funded

and implemented, the manual offers opportunity areas for other city agencies, elected officials, entrepreneurs, and foundations to continue to advance accessible mental health services in NYC.

Open Innovation Challenges are a collaboration framework for local communities. Open Innovation Challenges can be used as encompassing partnership umbrellas that allow community based organizations and residents to elevate their challenges to global audiences. Such a framework leverages the role of government as a convener to increase the reach of CBOs and nonprofits to donors, investors and allies. The challenges that Latinx communities in upper Manhattan face when it comes to culturally competent services mirror the realities of immigrant communities across the world.

Inclusive marketing for the competition is as important as inclusive design. Regardless of how inclusive the design of the competition has been, if marketing is not thoughtful and inclusive (language, location & media channels) then the opportunities will end up benefiting organizations that are already pursuing opportunities to work with the government.

Governments share challenges, and could be more impactful if they also shared resources. The Accessible Mental Health Challenge served as an opportunity to gather government officials from across the world, working on mental health across municipal, state and federal level, to discuss governance models and the role of government in making mental health services available and culturally competent. Working with other governments can provide valuable insights in terms of mental health challenges, types of community stigmas, and even information assets across languages and mediums. This is particularly relevant considering that approximately 36% of NYC population is foreign born.<sup>34</sup>

Our research identified how government programs at the national<sup>35</sup> and regional levels in Scandinavian and European countries were providing support for startups to expand operations in the United States.

In the case of Mexico, we found that the a federal law passed in 2018 "Norma Oficial Mexicana PROYNOM-035-STPS-2016" required certain companies to "establish the elements to identify, analyze and prevent psychosocial risk factors, as well as to promote a favorable organizational environment in the workplace." The policy not only created a de-facto cash transfer from the profits of the companies towards the mental health of their employees, but also generated a market for mental health startups to thrive-some of which applied to our open innovation challenge.

Both instances offer very different examples of how governments can support the creation of thriving mental health tech industries.

Open Innovation Challenges visualize other government's public policies. Through the challenge we identified the significant presence of Scandinavian and Mexican startups.

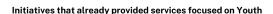
<sup>34</sup> NYC Mayor's Office of Immigrant Affairs (2020) "The State of our Immigrant City" available: <a href="https://www1.nyc.gov/assets/immigrants/downloads/pdf/MOIA-Annual-Report-for-2020.pdf">https://www1.nyc.gov/assets/immigrants/downloads/pdf/MOIA-Annual-Report-for-2020.pdf</a>

The Young Innovative Companies initiative from Business Finland is an example of such programs. See more at: <a href="https://www.business-finland.fi/en/for-finnish-customers/services/funding/young-innovative-company-funding">https://www.business-finland.fi/en/for-finnish-customers/services/funding/young-innovative-company-funding</a>

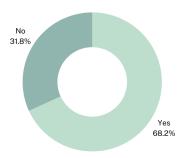
<sup>&</sup>lt;sup>36</sup> To learn more about the Norma Oficial Mexicana 35 go to: https://www.dof.gob.mx/nota\_detalle.php?codigo=5541828&fe-cha=23/10/2018

#### Mental Health & Innovation Findings

Tech-enabled mental health services are thriving, and yet minorities continue to be underserved. The Accessible Mental Health Challenge aimed to create incentives for companies providing mental health services to make their services more inclusive of the needs of youth, particularly latinx youth.

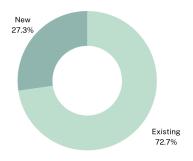


Information from the 22 full applications evaluated for the NYCx Co-Labs Accessible Mental Health Challenge



#### Existing vs. New Initiatives

Information from the 22 full applications evaluated for the NYCx Co-Labs Accessible Mental Health Challenge

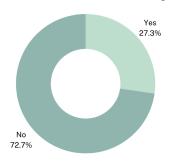


Two-thirds of the organizations that applied to our Open Innovation Challenge used the competition as an opportunity to expand their operations to youth, and Latinx populations. Similarly some companies, particularly those in the workplace mental health services space, leveraged the opportunity to expand from Business to Business (B2B) to Business to Consumer (B2C) models.

To increase diversity in the industry we need to support new teams and new ideas. The challenge focused on implementable solutions, which discouraged idea state proposals. However, if we aim to make companies more representative and solutions more inclusive of different cultural practices and realities across class, race and ethnicity, future challenges should have the infrastructure to receive, elevate and support new ideas.

#### Initiatives that already provided services for Latinx needs

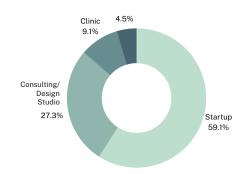
Information from the 22 full applications evaluated for the NYCx Co-Labs Accessible Mental Health Challenge



Open Innovation Challenges are cooperation frameworks. Looking for implementable solutions shouldn't prevent governments from encouraging commitments from the biggest players in the relevant markets. Challenges could maximize impact by having the following three categories: Idea Stage, Implementable Solution, and Industry Commitment.

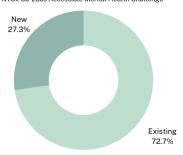
#### Types of organizations that applied

Information from the 22 full applications evaluated for the NYCx Co-Labs Accessible Mental Health Challenge



# Organizations focused on mental health vs. pivoting to mental health

Information from the 22 full applications evaluated for the NYCx Co-Labs Accessible Mental Health Challenge



The challenge is an opportunity to pivot. A quarter of the applicants saw the challenge as an opportunity to expand their services from non-mental health related areas to address mental health challenges of their constituencies.

Language accessibility is about transparency, accountability and collaboration. Inwood & Washington Heights are predominantly Spanish speaking neighborhoods. Making the competition available in Spanish and English was important to build partnerships with community based organizations, and residents.

Cultural responsiveness is much more than language accessibility. Simply translating services and content is not enough. Purchasing power and class indicators, life experiences, cultural practices, religious practices, eating habits, all are different across different communities and must be properly understood for any message to be delivered successfully.

Youth were difficult to engage both through schools and informal mental health services. One assumption of the challenge was that providing informal mental health services would decrease the reliance on education institutions to connect youth to the pilots. However, in the context of the pandemic, even the informal approach via CBOs and after school programs depended significantly on school administrators, teachers, and parent associations.

There are diverse tech-enabled mental health services in terms of the technology applications, and use-cases, but the user-personas tend to represent highly-connected majority communities in for-profit environments. The applications showed the use of diverse types of technologies to the provision of mental health services:

- Natural Language Processing: Several organizations proposed solutions that were leveraging different forms of speech recognition, speech segmentation & emotion recognition.
- Chatbot engagements: Although mostly originally applied in the context of the workplace, several organizations proposed strategies to leverage chatbots to identify emotions.
- Video sharing & making: Several organizations leverage video as a medium. Common applications would be content crowdsourcing, or inhouse education material creation.
- Video Game Engagement: Video games offered unconventional strategies to provide mental health education as well as extensive focused attention from players. This is an important opportunity area for governments to explore, considering the highly competitive nature of the industry and relatively large investments that video game studios require, government partnerships beyond the municipal level should be created to influence how video games address mental health challenges.
- Augmented Reality & Virtual Reality: AR/VR both in the context of educational institutions and as temporary activations in public spaces offer strategies for people to associate physical movement and exploration to the learning process of skills.

Most of the solutions provided a combination of the following four services: A) Learning skills and concepts; B) Apply skills and reflect; C) Learn about services and rights; and D) Receive mental health services. For services focused on the first two categories it was common to see a heavier application of technology to assess and match users with needs, whereas for those focused on the latter two

categories, technology was more of an engagement medium to then provide human-powered services.

The most common mediums used to engage with users were surveys, although there was great diversity in how surveys could be applied and responded, from behavioral science analysis to gamified questions.

Telehealth mental health services were a common proposal to ultimately provide services, pricing mechanisms and business models varied greatly, but the availability of services from different countries, and in different languages, opens multiple possibilities for mega-diverse immigrant communities.

#### **Urban Pilots Procurement & Management**

Micropurchases<sup>37</sup> as a procurement mechanism are not fast enough for rapid pilot testing and significantly hinder both the philosophical and operational objectives of these kinds of projects. The City of New York's procurement processes require 2-4 months from approval of the vendor scope of work review and approval of procurement mechanism to contract negotiations and drafting to execution of contract and final disbursement.

In the context of an innovation challenge, when we don't know who wins until the end of the competition, such a slow procurement process means that vendors must wait for 2-4 months after they have finished their scope of work to start working on a six month pilot. This delay causes numerous issues:

- Long wait times disproportionately affect smaller organizations that require the funding to start operations, and that do not have the ability to allocate resources beyond a particular proposed timeline.
- Community members that have participated in the selection process have to wait for several

- months before the winners start operating, which reduces buy-in and limits the ability of the vendors to work with community partners originally involved in the selection process.
- Slow procurements particularly hinder the ability of totally new ventures to thrive. When brand new organizations aim to leverage the competition to start operations, a long wait takes away momentum at a critical organizational juncture that may influence their capacity to deliver on the selected proposal.

Micropurchases of \$20,000 did not provide enough resources to cover the operational costs of six- to nine-month pilots. Challenge winners needed to develop partnerships with local advocates either to deploy or to co-design their products. Such work was labor-intensive and resulted in organizations working more than the reasonable expectation for the \$20,000 purchase. Such conditions can negatively impact smaller organizations, who cannot afford to hire additional staff to help implement a new program at this funding level.

Selection criteria for pilots must match expected outcomes and available resources. The selection criteria will determine the kind of applicants one could expect. The more demanding and specific, the more time that vendors would be expected to dedicate to the application. If the goal is to incentivize new ideas, and new organizations, then the criteria should be flexible, and the challenge should provide support for the organization to develop both the solution and the organizational capacity to implement it.

<sup>37</sup> Micropurchases are procurement mechanisms that allow City Agencies to procure goods and all services except construction the value of which is \$20,000. See more about procurement processes in NYC at the Procurement Policy Board (PPB) Rules: <a href="https://www1.nyc.gov/site/mocs/legal-forms/procurement-policy-board-ppb-rules.page">https://www1.nyc.gov/site/mocs/legal-forms/procurement-policy-board-ppb-rules.page</a>

## **Policy Recommendations**

#### **NYC Agency Capacity Building**

Build internal capacity of City agencies to do civic engagement with youth. Doing civic engagement in general, and particularly with youth, can be challenging even for City agencies. The City should allocate resources towards:

- Breaking silos and creating interagency address books of youth-focused organizations;
- Building the capacity of City agencies who do not traditionally work with youth or that work through intermediaries by providing training for staff members on legal considerations, and how to work with youth;
- Allowing funding to intermediaries who can reach and make connections to communities of focus; and
- Incentivizing inter-agency learning events, and spaces to maximize the benefits of already successful initiatives.

Meet youth where they are in the digital world. City agencies should develop interagency policies and practices on how to work with youth in digital spaces. Rather than opting out of digital spaces because they represent non-traditional forms of content distribution, City agencies should build the capacity to leverage new mediums to provide their services.

Youth have their own voices, and we should all listen. City Agencies across the board should develop strategies to communicate their work to youth and to learn from them about what they could do to be more relevant and useful to address their needs. Initiatives such as the <a href="Participatory Budget">Participatory Budget</a> led by the NYC Civic Engagement Commission or the MAP Youth Leadership Council of the NYC Mayor's Office of Criminal Justice are great examples of what can be done in the context of NYC.

Increase cooperation with Council Members to develop and maintain community networks in languages other than English. Community

networks require maintenance, management, and constant messaging to stay relevant. City agencies should invest in staff to do community management at the resident level, as well as community rosters at the resident level to increase the ability of public servants to improve user testing and co-design.

Allocate resources to compensate residents for participation in user-research sessions and incentivize participation. Constant user-research should be a part of any city service. Compensation should be provided, especially when we work with communities who face different forms of systemic inequality.

Evaluate how procurement mechanisms in the City of New York could negatively impact companies providing business to business services. The practice of evaluating the impact of funding against direct New Yorkers served, might limit the ability of local CBOs, and Schools to obtain funding to invest in technologies and tools that could help them improve their services.

Improve the City's governance for the provision of services in languages other than English. Local Law No. 30, requires all City agencies to provide opportunities for Limited English speakers to communicate and receive services.<sup>38</sup> As a result, City agencies covered by LL30 have developed language access plans. The Mayor's Office of Immigrant Affairs (MOIA) continuously works to increase the capacity of other agencies to provide assets in all official languages. However MOIA's resources are limited, and City officials do not necessarily have the language capacity to provide services in all languages. The following recommendations could improve city capacity to provide the same quality of services to the nearly 1.8 million of New Yorkers who speak English "less than very well":

 Increase resources: Increase the funding available to MOIA and language access teams to translate, create assets, and content in all

<sup>&</sup>lt;sup>38</sup> Official languages covered under Local Law 30 are: Spanish, Chinese, Russian, Bengali, Haitian, Korean, Arabic, Urdu, French, and Polish.

official languages or relevant languages to the communities served.

- Increase collaboration: Increase the available opportunities internally for language access teams to exchange best practices and to implement successful strategies across city agencies. Encourage asset management strategies for City agencies to keep assets updated, relevant and accessible.
- Provide training: Promote, encourage and support language training for government officials. Provide training for multi-lingual government officials on technical translation to increase the quality of in-house assets.

# Cultivating a Mental Health & Innovation Tech Ecosystem

Open an "idea track" when procuring solutions or launching competitions. Not all ideas are ready to be deployed, and not all institutions have the capacity to work with the government, but if someone has the interest in addressing a community challenge, government should have the capacity to listen and cultivate such ideas. Government agencies that are already launching open competitions, should open "idea tracks" to identify potential allies, and support community-driven initiatives.

Open an "Industry Commitment" category when procuring solutions or launching competitions. The largest and most influential industry players, which usually have profitable business models and investments backing their operations, will not be necessarily attracted through prize money, however the opportunity to work towards shared values, to receive peer recognition and to contribute to social development provides the incentives to join a call to action to work with the government. Open innovation challenges can serve as a mechanism to influence their operations and create industry commitments to advance equity and inclusion across their services and products.

Elevate funding to at least 40K per pilot: \$20K to fund pilot customization, and another \$20K to support community engagement and pilot deployment. Agencies should have more funding available to support pilot deployment that they can use at their discretion to prevent challenge winners from working pro-bono beyond the limits of contracts.

Telehealth is a promising mechanism to serve immigrant youth in the context of limited access to insurance and expensive services. Both of the pilots supported through this challenge focused on providing informal mental health education and applicable skills for youth. The city should explore how to leverage the elevated purchasing power of New Yorkers vis a vis mental health service providers from other geographies to make more affordable and more culturally competent services available to New Yorkers.

Strengthening informal mental health services and outside non-school centric services is key to better serve Latinx Youth. The context of the pandemic made schools one of the critical places for youth to virtually gather, which posed a significant challenge for non-school centric mental health services. The City should research strategies to better interconnect informal mental health services as well as strategies to strengthen the resiliency of such services.

Provide more funding to support the creation of culturally competent content. The community engagement efforts of the NYCx Co-Labs partners and both pilot winners-which amounts to more than 100 educators, community experts, educators and organizations-identified over and over the lack of culturally competent content as a key problem among Latinx youth.

All communities deserve the same quality of services. The challenges identified throughout this challenge in the context of Latinx youth are shared among other underserved communities. The City should invest in improving the availability of culturally competent content that is tailored to the needs of different religious communities, ethnic, racial backgrounds prioritizing low income and immigrant communities.

# **Appendix**

# **Community Tech Board Members**

Name	Organization
Adam Fran	Local resident
Allegra LeGrande	NASA Scientist - Local Resident
Ayisha Oglivie	CB12
Joseph Barba	CCNY/ Zahn Innovation Center
Charles Corliss	Inwood Community Services
Charlene Edwards	NYC Parks + Recreation / J Hood Wright Recreation Center
Christopher Nickell	Uptown United
Devin Voorsanger	Zahn Innovation Center
Danny Reyes	Traiilo
Diego Quintuña	Inwood Community Services, Asst Director Work Learn Grow
Eddie Silverio	Catholic Charities/Alianza Dominicana
Bruce Forman	New York Presbyterian Hospital / IEC for Health and IT
Frank Diaz	American Association of Latinos in STEM
Jose Salcedo	Dyckman Digital
Juan Camilo	Dyckman Beer Co.
Led Black	Uptown Collective
Lucia Alcantara	Futures Today Consulting
Maria Lizardo	Northern Manhattan Improvement Corporation
Michael Zigman	FIRST Robotics
Naiomy Rodriguez	Dyckman Farmhouse Museum
Obed Fulcar	Friends of Sherman Creek Conservancy
Patricia Falto	New York Presbyterian Hospital
Richard Lewis	CB12, 1st vice chair, interest in biotech, STEM
Rodrigo Camus	Northern Manhattan Improvement Corporation
Edgar Roman	Resident
Ralph Vacca	Educator, Latinx Tech Innovator
Seny Taveras	CUNY in the Heights
Tiasia O'Brien	Seam Social Labs
Tiffany Lee	Altagracia Faith and Justice Works
Washington Hernandez	PS8-Luis Belliard School
Yandra Castillo	Inwood Community Services, Asst Director Work Learn Grow
Yecenia De La Rosa	Gregorio Luperon High School
Yolise Fajardo	Inwood Community Services, Asst Director Work Learn Grow

# Community Overview: Inwood & Washington Heights

#### **Community Context**

In the northernmost tip of Manhattan lie the culturally rich Inwood and Washington Heights neighborhoods, which are home to over 210,000 residents.<sup>39</sup> About 74% of the population identifies as Latinx, and the largest group in the community is of Dominican descent. With a foreign-born population of almost 50% (102,000 residents), Inwood and Washington Heights have a diverse cultural identity deeply intertwined with the Caribbean nations.

These neighborhoods stretch from the Hudson River on the west side to the Harlem River on the east side, extending from West 220th Street down to West 155th Street and make up Community District 12. The median household income in MN12 is \$47,496, compared to the median of \$79,781 in Manhattan.<sup>40</sup> More than 21% of residents live on incomes below the federal poverty threshold, and a third are under age 18.<sup>41</sup> The district also has a high unemployment rate, estimated around 10.3%.<sup>42</sup>

#### **Issue Context**

The area has the largest concentration of children and youth in Manhattan, with over 35,000 residents aged between the ages of 5 and 19 years old<sup>43</sup>. The community has a higher number of teenage mothers



than any other district, and residents are less likely to have access to regular physical or mental health care (14% are uninsured<sup>44</sup>).

The local hospital, New York-Presbyterian/Columbia University Medical Center, treated over 3,800 psychiatric patients in 2016, over 66% of which were treated for depression. During interviews with hospital experts in 2018, they identified Latinx youth in the area as one of the most high risk groups.

Inwood and Washington Heights are located in a federally-designated Mental Healthcare Shortage Area (MHSA).<sup>45</sup> New Yorkers who live in MHSAs may have a much harder time accessing mental health care due to a low ratio of mental health providers to residents compared to other neighborhoods.

<sup>39</sup> New York City Community Health Profiles, NYC Department of Health, 2018. <a href="https://www1.nyc.gov/site/doh/data/data-publications/profiles.page">https://www1.nyc.gov/site/doh/data/data-publications/profiles.page</a>

<sup>40</sup> U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates. Table number B19013 (Median Household Income in the Past 12 Months). Income in 2017 inflation-adjusted dollars.

<sup>41</sup> CB12 Needs Assessment, 2018

<sup>42</sup> American Community Survey 3 year estimates

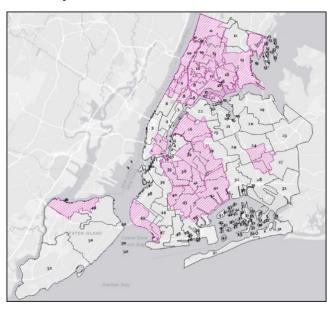
<sup>43 &</sup>quot;Our Community Profile: Manhattan Community Board 12", NYC. gov, last accessed, December 2019. <a href="https://www1.nyc.gov/html/">https://www1.nyc.gov/html/</a> mancb12/html/community/profile.shtml

<sup>44</sup> New York City Community Health Profiles, NYC Department of Health, 2018. <a href="https://www1.nyc.gov/site/doh/data/data-publications/profiles.page">https://www1.nyc.gov/site/doh/data/data-publications/profiles.page</a>

<sup>45</sup> Shortage Areas. <u>data.hrsa.gov/topics/health-workforce/short-age-areas</u>

In addition to geographic barriers to care, community leaders have expressed concerns about the mental health of local residents, due in part to stressors stemming from immigration, housing and education. They identified specific mental health barriers in Inwood and Washington Heights, including having limiting beliefs about oneself, a poor understanding of preventative care, a lack of culturally competent services, a need for community owned education and healthcare, a lack of data across different demographics, and a lack of information that leads to action.<sup>46</sup>

# Map of Mental Healthcare Shortage Areas (MHSA) in NYC by Council District.



Source: Map created by the Mayor's Office of ThriveNYC based on data of federally-designated mental healthcare.

The City of New York offers the following definitions for key terms used throughout this Challenge Report:

- Mental Health: The World Health Organization defines mental health as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." The CDC further states that "...Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices".47
- Depression: "Depression (major depressive disorder or clinical depression) is a common but serious mood disorder. It causes severe symptoms that affect how you feel, think, and handle daily activities, such as sleeping, eating, or working." 48
- Anxiety: "Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may also have physical symptoms such as sweating, trembling, dizziness or a rapid heartbeat.

**NYC Mental Health Definitions** 

<sup>46</sup> As reported to NYCx Co-Labs during community listening sessions

<sup>47 &</sup>quot;Mental Health and Well-Being." www.heart.org, (n.d.). <a href="http://bit.ly/31jZBxF">http://bit.ly/31jZBxF</a>

<sup>&</sup>lt;sup>48</sup> "Depression." The National Institute of Mental Health, U.S. Department of Health and Human Services, (n.d.). <u>www.nimh.nih.gov/health/topics/depression/index.shtml</u>

# Challenge Design & Selection Process

## **Community Engagement & Research**

Community Based Organizations (CBOs) engaged for challenge design		
Community Information Sessions to join design challenge		
Thematic challenge design workshops with CBOs	6	
People participating in community workshops	44	
Direct CB-12 resident responses through ONENYC Survey	190	
<ul> <li>Community Feedback Reports</li> <li>Building Community Power</li> <li>Challenges to Immigrant Communities</li> </ul>	2	
Documents evaluated in literature review		
Interviews with Health Community Experts and Local Hospital		
Interagency design workshops (OCMH, NYCEDC, MOCTO)		

## **Challenge Outreach Indicators**

Open Application Window <sup>49</sup> (months)	
International Government Partners	8
Challenge Website Users (Feb 25 - July 15)	1,525
Challenge Website Sessions (Feb 25 - July 15)	2,129

(continues on next page)

<sup>49</sup> On March 12, 2020 NYC declared a state of emergency due to the Covid-19 Outbreak. All City Employees devoted their attention to work on emergency response which led the innovation challenge application window to be extended until July 15.

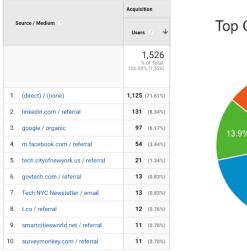
## Challenge Outreach Indicators - continued

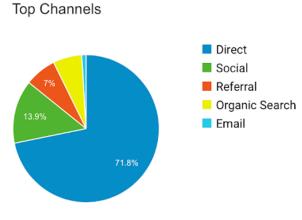


## User distribution by Country, City & Language

Country	Users	% Users	City	Users	% Users	Language	Users	% Users
1. Multiple States	1,085	70.92%	1. New York	505	32.29%	1. en-us	1,023	66.86%
2. Mexico	241	15.75%	2. Mexico City	95	6.07%	2. en	151	9.87%
3. Germany	31	2.03%	3. Cheyenne	74	4.73%	3. es-es	65	4.25%
4. He Finland	29	1.90%	4. (not set)	70	4.48%	4. es-419	61	3.99%
5.    Guatemala	23	1.50%	5. Quincy	55	3.52%	5. es-mx	40	2.61%
6. Netherlands	16	1.05%	6. Ashburn	35	2.24%	6. en-gb	39	2.55%
7. Colombia	12	0.78%	7. Helsinki	28	1.79%	7. es-us	33	2.16%
8. Singapore	12	0.78%	8. Berlin	27	1.73%	8. es-xl	31	2.03%
9. III United Kingdom	9	0.59%	9. Guatemala City	23	1.47%	9. de-de	17	1.11%
10. Mong Kong	9	0.59%	10. Guadalajara	21	1.34%	10. fi-fi	13	0.85%

## User distribution by Source





Source: NYCx Challenge website analytics.

# **Challenge Applications**

Started Applications	24
Submitted & Complete Applications	22
Countries represented in submitted applications	4
Solutions pitched to agency partners & community members	10
Finalists	5
Winners	2

## **Winner Selection Process**

Selection Process	Description
Agency Evaluation	Agency judges from OCMH, MOCTO and NYCEDC reviewed all applications based <u>on the challenge criteria.</u>
First Feedback Round for Finalists	All finalists received clarifying questions and were invited to participate in a virtual pitch with agency partners and community members.
UX/UI Design Feedback Round	All solutions were evaluated by a panel of UX/UI Designers based on the following criteria.
	User-centric/relevant - Concept: Have we enough data to believe that idea solves a real human need? Was research involved in framing the problem?
	User-centric-User Experience: is the idea executed well, with good design, clear mental models, and a good user experience and usability? Do we agree with any implicit assumptions around user behavior? Has the design been tested with users?
	Innovative: have we seen something like this before?
	Scalable: Does it feel like the idea can be scaled? Are there tech elements that will cause issues (ie, unscalable feedback or moderation mechanisms, manual back-ends, etc). Is user adoption considered or does the idea rely on scale from the beginning?
	Other: is there something that gives us pause in terms of technical implementation (or general "plausibility") - are there assumptions we don't share?
VC Feedback Round	VCs provided feedback on the scalability and potential of the projects to raise private funds.
Pitch sessions	Finalists had 10 minutes to present their solution and 20 minutes to answer questions from judges and community members.

# Information Sessions & Mental Health Challenge Events

Event Title	Partners	Date
Public Private Partnerships for Public Innovation  @ Zahn Innovation Summit	The Zahn Innovation Center, City College of New York	February 2019
Mental Health & Inclusivity: Co-creating Inclusive Innovation	World Economic Forum, DQ Institute, NYC Economic Development Corporation, NYC Mayor's Office of Community Mental Health, NYC Mayor's Office of the CTO	February 2020
Tackling Covid-19 and Social Issues in NYC and Beyond  @ Call for Code Event Series	IBM, Clinton Global Initiative , NYC Mayor's Office of the CTO	May 2020
NYCx Co-Labs Accessible Mental Health Challenge Information Session	NYC Economic Development Corporation, NYC Mayor's Office of Community Mental Health, NYC Mayor's Office of the CTO (Virtual)	June 2020
NYCx Co-Labs Accessible Mental Health: Pitch Session 1	NYC Economic Development	September 2020
NYCx Co-Labs Accessible Mental Health: Pitch Session 2	Corporation. NYC Mayor's Office of Community Mental Health,	September 2020
NYCx Co-Labs Accessible Mental Health: Pitch Session 3	NYC Mayor's Office of the CTO, Inwood Community Tech Board	September 2020
Soluciones innovadoras para la atención de la salud mental en el contexto del COVID-19 (Spanish)	NYC Mayor's Office of the CTO, NYC Mayor's Office of Community Mental Health, Secretaria de Relaciones Exteriores, Secretaria de Educación, Ciencia, Tecnología e Innovación de la CDMX, Coordinación General de Asesores y Asuntos Internacionales de la CDMX	September 2020
Mental Health Youth Listening Session with Congressman Adriano Espaillat	NYC Mayor's Office of Community Mental Health, Congressman Adriano Espaillat, Assembly Member Carmen De La Rosa	May 2021
Insights from New York City- Community Driven Innovation: Accessible Mental Health	Global Design Thinking Alliance, Hasso Plattner Institute	September 2021
Finalist 2021 IDC Smart Cities North America Awards in the category of Public Health and Social Services	Organizers: IDC	October 2021



