

OUR YEAR IN REVIEW 2019

HOPELAB



MISSION



Hopelab creates behavior-change tech to help teens and young adults live happier, healthier lives.

We are Hopelab, a social innovation lab committed to supporting and improving the health and well-being of teens and young adults. Hopelab works with young people to co-create interventions grounded in behavioral science and human-centered design, conducts rigorous testing, and distributes these solutions in collaboration with partners.

TROUBLING TRENDS

TEEN HEALTH AND WELL BEING

Young adults are the loneliest generation

In a recent survey of more than **20,000** US-based adults **Gen Z adults (18–22)** reported **greater loneliness** than any other adult generation surveyed.

Suicide is the second leading cause of death for 15 to 24 year-olds

LGBT youth are almost **5x as likely** to have attempted suicide compared to heterosexual youth. That rate rises to 9x for transgender Americans.

Teen vaping is extremely popular and on the rise. In 2018, **38% of high school seniors** in the US reported past year vaping, **up 10% from the year prior**. Vaping nicotine is highly addictive, and causes more teens to try smoking, leading to lifelong smoking, and more deaths from smoking-related disease.



Young adult patients with **cancer** report more **negative psychosocial outcomes** than do older patients.

Only **~50% of teen mothers** receive a high school diploma by the time they turn 22 years old, as compared to **90% of women who do not give birth during adolescence**.

FROM THE PRESIDENT

The teen and young adult years are an incredibly important time in brain development, identity formation, and establishment of behaviors that significantly influence an individual's life and health trajectory.

Young people are creators, innovators, experimenters and dreamers. Our collective future depends upon our success in supporting them to achieve their full potential. As a society we've under-invested in the preventive and supportive services that can help young people—especially those with risk factors and vulnerable populations—grow and flourish through adolescence and into young adulthood.

Further, we're seeing troubling trends in the mental and physical well-being of our teens and young adults. Depression, loneliness, and lack of social connection are becoming increasingly common among in these generations: the total number of teenagers who recently experienced depression increased 59% between 2007 and 2017.

Interventions that can help young people establish and maintain health-promoting behaviors, such as forming supportive emotional bonds, developing resilience in the face of adversity, and establishing positive nutrition and exercise habits can ensure that this phase of life sets them up for a thriving, productive future.

At Hopelab, we believe that investing in and innovating with young people—helping them unleash their ideas and potential—is one of the most powerful ways to re-frame the period of adolescence from one full of hazards and risks to one of the great potential we need to continue to grow and flourish as a society. 2019 has been an exciting year for us; we got three new products into the hands of young people and conducted scientific research to validate their impact. We also launched our Young Adult Advisory Council and a number of new partnerships. We're looking forward to amplifying our impact in 2020!



Margaret Laws
President and CEO

WHO WE ARE

As a social innovation lab, we've built a diverse team and have access to the flexible capital that positions us to take on the challenge of innovating in tough terrain like teen/young adult mental and emotional well-being.

Hopelab staff have expertise in behavioral science, human centered design and digital product development, and we partner with aligned organizations to pilot and test new ideas and scale proven interventions. Our innovation process emphasizes both the importance of the human touch and the power of technology, and we are committed to co-creating products with young people.

Our design and product development work focuses on improving health and well-being of teens and young adults in the US, and we're excited to see our solutions used around the world.



OUR BELIEFS & COMMITMENTS



PARTNERSHIPS FOR SCALABLE CHANGE

We believe the health challenges facing today's teens and young adults are multidimensional, intersectional, and broad. Social change at scale simply can't be accomplished by a single person, organization, or institution.

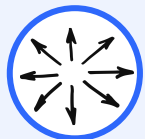
We are committed to facilitating partnerships among diverse constituents — including young people, governments, advocates, non-profit organizations, and education and health care providers — to collaboratively develop scalable solutions to improve health and life outcomes for teens and young adults.



DIGITAL HEALTH

We believe the evolving field of digital health has made and will continue to make accessible and cost-effective interventions available at unprecedented speeds. However, digital health needs to incorporate rigorous scientific testing so that interventions are as effective as they are innovative.

We are committed to maintaining rigorous standards for our digital health interventions, building solutions that bring together the speed and nimbleness of the best innovators with the rigor and empirical testing of leading researchers. We are also committed to helping the field create digital solutions that are informed, tested and validated by young people to ensure effectiveness and desirability.



SCIENCE AND DESIGN

We believe that science and design, when approached collaboratively, can be powerful forces in addressing the health challenges of teens and young adults. Each discipline brings significant potential that can only be fully realized when the two are integrated.

We are committed to the difficult—and inspiring—work of bringing together behavioral science and human-centered design to deeply understand challenges, frame opportunities that motivate the passion of young people, and create powerful solutions that can scale broadly.

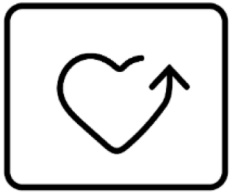


CO-CREATION

We believe that no one is better qualified than teens and young adults to give voice to the social and health challenges facing their generation.

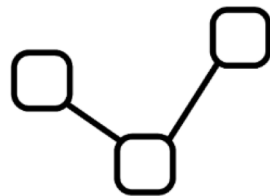
We are committed to putting young people at the center of all we do, engaging them in the development of products and interventions that help them lead happier, healthier lives.

OUR PROCESS: REVERSE ENGINEERING HEALTH



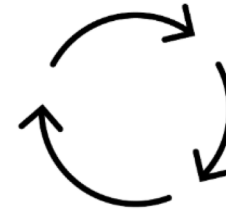
TECHNOLOGY

.....



PSYCHOLOGY

.....



HEALTH
BEHAVIOR

.....



SUCCESSFUL
OUTCOME

Health outcomes have multiple, complex causes that can be addressed with a variety of strategies and levels of intervention. At Hopelab, our focus is on individual behavior change among teens and young adults. We reverse engineer health to develop tech-based interventions that leverage individual behaviors and the psychological processes underlying them to drive positive health outcomes.

Here's how it works:

We start by identifying a health outcome we want to improve. We focus on areas where there is significant unmet need and where meaningful improvement would allow teens and young adults to live happier, healthier lives. We've targeted a range of outcomes including decreased risk for obesity or depression, and improved survival rates for young people diagnosed with cancer.

Next, we identify the key behavioral and psychological drivers of that health outcome, asking whether and how technology might be leveraged to specifically target those drivers.

Finally, we work to “reconstruct” the positive outcome, creating tech-based interventions that are specifically designed to target the key behavioral and psychological drivers of the health outcome we're after.

HOPELAB BY THE NUMBERS: 2019

of active projects in 2019

11

(3 large, 8 small)

of staff media interviews

14

(5 radio podcast, 3 TV, 6 print)

of randomized trials conducted

3

of conference presentations given

48

of Hopelab blog posts

29

of young people in trials

571

of awards received

3

of external publications

29

of academic studies published or funded

5

of teens/young adults who used Hopelab products

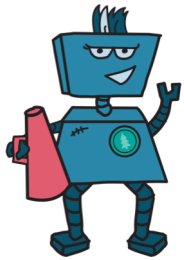
2,728



OUR WORK

We invest in multi-year projects to develop and test interventions and distribute products

Currently, we're invested in **three** multi-year projects with products in the market across the county



Vivibot



nwd

We engage in shorter projects and explorations with a range of partners – to help build our capacity and support the field of health/well being of teens and young adults

Five projects initiated this year on: teen vaping, online dating, safe social media use, mental health of young moms, teens and mindfulness



TEEN
VAPING



TEENS &
MINDFULNESS



SAFE SOCIAL
MEDIA USE



ONLINE
DATING



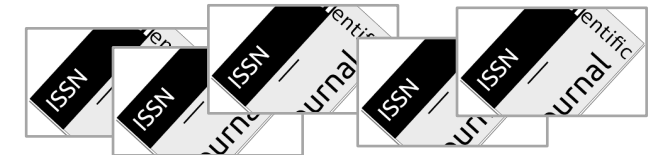
MENTAL HEALTH
OF YOUNG MOMS

We conduct and sponsor research, translating behavioral science findings into products and services

One peer reviewed publication by Hopelab team



Five papers published in academic journals by authors with studies supported by Hopelab



Six grants totaling \$188k

to support the broader field of TYA health & well-being research.



GOAL MAMA



Helping high risk, first time moms succeed

Hopelab collaborated with the Nurse-Family Partnership (NFP) to introduce their first consumer-facing technology, a platform to help improve engagement of “digital native” moms in what was a completely analog program. This project built upon NFP’s existing model, which pairs a low-income, first-time mom with a nurse to improve the life and health outcomes of moms and babies. Hopelab worked with NFP moms and nurses to co-create a digital platform, Goal Mama, that helps manage program logistics and supports clients in setting, working toward and achieving goals. Goal Mama was piloted in AL, CA, MN and NY in early 2019, and has now been rolled out to more than 1000 nurses in 22 states. The program currently serves 50,000 families annually, and national rollout to nurses and moms in all 42 states where NFP is active is expected by the end of 2021. For more information, visit [Hopelab](#) and [NFP](#).

Distribution:



More than
150 sites
across the country are
enrolling moms in Goal Mama

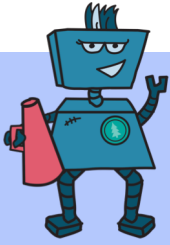


More than
1000 nurses
are on the platform



More than
2000 moms
used the Goal Mama app in 2019





Improving mental/emotional health outcomes of teens and young adults with cancer

Vivibot is a multi-award-winning chatbot designed to help cancer survivors navigate life after diagnosis through resilience and skill building. Co-designed with young cancer survivors, Vivibot delivers an intervention that teaches seven positive psychology skills accompanied by videos featuring young people telling the stories of their own cancer journeys. A trial of young cancer survivors showed significant improvement in anxiety symptoms after a month of use; peer-reviewed study results were [published](#) in the Journal of Medical Internet Research in November 2019. 45 young people participated in the study, and by year end more than 528 young people with cancer will have chatted with Vivi. This fall Vivibot launched on its new home, the GRYT platform, the nation's largest social community for young cancer patients and their families and supporters.

Clinical trial:



45 young adults treated for cancer (36 women; mean age: 25)



Spent an average of **74 minutes** across an average of 12 active sessions chatting with Vivibot



After **4 weeks**, participants who chatted with Vivibot showed reduced anxiety while the control group reported an increase in anxiety.



Would recommend Vivibot and particularly liked its nonjudgmental nature



Helping college students build
social connection skills

30% of college students reported feeling “very lonely” in the past two weeks, while 60% reported feeling “very lonely” within the past year. This heightened loneliness has the potential to erode students’ mental health, undermine academic success, and decrease likelihood to engage in social settings. Loneliness also increases future risk of depression, drug and alcohol abuse, and self-harm behavior measured up to 15 years in the future. Loneliness and depression are also predictors of student dropout. In the U.S. levels of loneliness are highest among Generation Z, meaning current college-age adults belong to the loneliest generation alive today.



To respond to these trends, Hopelab began work in 2017 on Nod. The Nod intervention focuses on teaching the skills of social connection, reflection and self-compassion, with the goal of moving the needle on loneliness, and ultimately on anxiety, depression and suicide. Partnering with Grit Digital Health, Hopelab designed, tested and launched the intervention in the fall of this year. Nod is currently being tested in a randomized controlled trial with 200 students at University of Oregon. Results from this study will be available in early 2020.

Enrolled **220**
first-year students at
U of Oregon in one
week (mean age 18.7;
59% female). Half of
the students reported
feeling highly lonely.

98% of students
in the experimental
group downloaded the
Nod app.

Survey completion:
100% at baseline and
99% at
2 weeks and
96% at 4 weeks.

SMALL PROJECTS

Hopelab works on several small projects each year. These range from short term consulting engagements with others working on digital tools to improve health/well being of young people to efforts that allow Hopelab staff to learn and deepen expertise by taking a “deep dive” in a new area.

UNICEF Kid Power



Outcome

- Supported successful product pivot from wearable to web-based platform.
- Provided guidance on aligning product to metrics and maximizing motivational impact.
- Identified and facilitated a key academic research collaboration.

Learning and Impact

- Developed a two day “deep dive” engagement approach and criteria to deliver value to another organization.

Ounce of Prevention



- Assisted the Ounce in refining its strategy to build a parent self-reflection tool and identifying and selecting a design firm to assist in further developing the tool and distribution strategy.

- Accelerated a mission-aligned organization's digital project development and go to market strategy.
- Deepened Hopelab's knowledge and reputation in the young parent space.

Teen Mindfulness App



- Supported product evolution from individual to classroom-based platform.
- Prototyped an educator dashboard for next phase testing.

- Confirmed that teen mindfulness app company could be a potential partner for a larger project.

Teen Social Media Use



- Supported the Stanford Center for Youth Mental Health and Wellbeing in their effort to create guidelines for "safe" Social Media Use for health practitioners who work with teens.
- Conducted remote interviews and online focus groups uncovered the most important issues for teens.

- Deepened Hopelab's working knowledge of tools for remote learning from our target youth audience.
- As social media changes and online norms evolve, we're seeing teens adapt and protect their mental well-being.

SMALL PROJECTS (CONTINUED)

Hopelab works on several small projects each year. These range from short term consulting engagements with others working on digital tools to improve health/well being of young people to efforts that allow Hopelab staff to learn and deepen expertise by taking a “deep dive” in a new area.

Parent Vaping Guide



Outcome

- Developing a product (parent vaping guide) that will be distributed by our partner (American Heart Association)

Teen Vaping Behaviors



- Learned about the vaping epidemic from the young adult experience. Video storytelling connected the Hopelab staff to the youth that are living this destructive trend.

Teen Vaping Convening



- Deeper learning about teen vaping epidemic from the expert (UCSF Center for Tobacco Control Research and Education) and social marketing (Rescue Agency) perspectives.
- Developed a set of principles/design guidelines to adapt an existing intervention for young adult smokers to teens and vaping.

Teen Online Dating Effort



- Learned about how apps have changed the dating habits of young people. Through remote and in person interviews, we unpacked issues such as expectations, risks and identity presentation.

Learning and Impact

- Tested a model of rapidly prototyping an online intervention (product) in the context of a small project.

- Hopelab staff gained a better understanding of the social pressures that TYAs feel to vape and the specific behaviors surrounding this type of addiction. This provides context around other potential vaping prevention work at Hopelab.

- This exploration gave the Hopelab staff an even better understanding of the teen vaping experience through the lens of researchers in the field, and those seeking to influence teen health behavior through media campaigns (e.g., the Rescue Agency).

- Dating is a major part of a young person's identity formation and mental health.
- This project helped the team feel the impact of dating on young people's lives and build upon this learning in larger projects: LGBTQIA, Breakups, and Nod.

HOPELAB RESEARCH: 2019 GRANTS AND PUBLICATIONS

| Notable Publications | | | | |
|-----------------------------------|--|--|--|------|
| Category | Title | Publisher | Featured Author Citation | Date |
| Peer reviewed journal publication | Use of the Chatbot “Vivibot” to Deliver Positive Psychology Skills and Promote Well-Being Among Young People After Cancer Treatment: Randomized Controlled Feasibility Trial | JMIR Mhealth Uhealth | Greer, S., Ramo, D., Chang, Y. J., Fu, M., Moskowitz, J., & Haritatos, J. (2019). Use of the Chatbot “Vivibot” to Deliver Positive Psychology Skills and Promote Well-Being Among Young People After Cancer Treatment: Randomized Controlled Feasibility Trial. JMIR mHealth and uHealth, 7(10), e15018. | 2019 |
| Grant sponsored publications | Promoting adolescent health: Insights from developmental and communication neuroscience | Behavioral Public Policy | Pei, R., Kranzler, E. C., Suleiman, A. B., & Falk, E. B. (2019). Promoting adolescent health: Insights from developmental and communication neuroscience. Behavioural Public Policy, 3(1), 47–71. | 2019 |
| Grant sponsored publications | Purpose in Life and Conflict-Related Neural Responses During Health Decision-Making | Health Psychology | Kang, Y., Strecher, V. J., Kim, E., & Falk, E. B. (2019, April 22). Purpose in Life and Conflict-Related Neural Responses During Health Decision-Making. Health Psychology. Advance online publication. http://dx.doi.org/10.1037/hea0000729 | 2019 |
| Grant sponsored publications | Neural valuation of antidrinking campaigns and risky peer influence in daily life | Health Psychology | Scholz, C., Doré, B. P., Cooper, N., & Falk, E. B. (2019). Neural valuation of antidrinking campaigns and risky peer influence in daily life. Health Psychology, 38(7), 658-667. | 2019 |
| Grant sponsored publications | Kindness and Cellular Aging: A Pre-Registered Experiment Testing the Effects of Prosocial Behavior on Telomere Length and Well-Being | eScholarship: UC Riverside Electronic Theses and Dissertations | Fritz, M. (2019). Kindness and Cellular Aging: A Pre-Registered Experiment Testing the Effects of Prosocial Behavior on Telomere Length and Well-Being. UC Riverside. ProQuest ID: Fritz_ucr_0032D_13816. Merritt ID: ark:/13030/m5dv6n8f . Retrieved from https://escholarship.org/uc/item/9t81j2hj | 2019 |

HOPELAB ADVISORS



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YOUNG ADULT ADVISORY COUNCIL



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Michaela Chai
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Richa Gupta
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HOPELAB PARTNERS



stupidcancer®



Yale *Center for
Emotional Intelligence*

Exygy

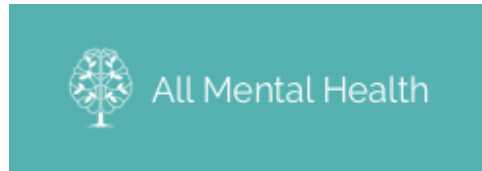


HOPELAB PARTNERS (CONTINUED)



get active. save lives.®

SECONDMUSE



2019 AWARDS



Goal Mama

Robert F. Hill award
for exceptional impact



Vivibot

Fast Company Design
Awards: Honorable mentions
in the Health and Games &
Apps categories



Vivibot

Design Management
Institute: Honorable
mention