



Advancing an m-health approach to supporting front-line healthcare workers

OHCOW Mayday –May 1, 2020 Sandra Moll









Safe Environments. Healthy Workers.

Dispatches from BC's Front Lines

I doff my protective equipment meticulously, terrified of contaminating myself. Still, I feel contaminated. I shower and change. I know I can't see my family now. I'm alone. I hear the 7 p.m. cheer once I'm home and I break down sobbing.

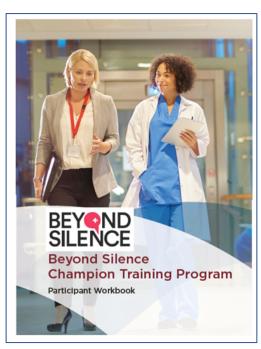
—Dr. McEachern, Mar14

If you asked any paramedic right now what the theme of the pandemic has ben, I think many would say 'moral dilemma'. ... The disparity between what we can do and what we must do is a leading cause of mental injury among us.... – J Hamilton, Apr 1

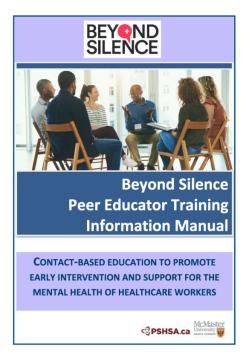
Working another night shift this week, I notice a new phenomenon in the evolution of this pandemic: a form of COVID fatigue. ...It's hard to see a light at the end of the tunnel. –Dr. Kalla, Apr 23

...the page rang out: CODE19. Someone sick was arriving imminently.... The team did what they could – CPR, intubating. In the end we 'called it'. ... We took a quiet moment for the patient, now passed. –Dr. McE., Apr 14

Beyond Silence Research



2-day workplace training program



2-day "train the trainer" program



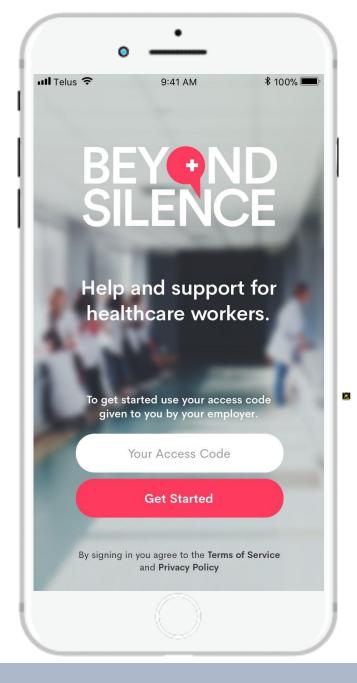
Mobile app

+ Online "community of practice" (webinars, discussion forum)

Purpose of Project

- To develop, and pilot test a smartphone app that promotes mental health literacy and mobilizes healthcare workers to seek mental health support for themselves and their colleagues
- Focus: small under-resourced healthcare organizations in Ontario





Mobile App

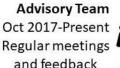
Goal: To create an online, evidence-based, information & support tool customized for healthcare workers

Meeting the challenge:

- -reduce stigma of seeking help
- -increase access to high quality info & support, particularly in small, under-resourced areas
- -provide 24/7 on-demand assistance



App Development







June 4-6, 2017 CIHR Hackathon



SPRINT 1 July-Aug, 2017 Scope definition & Onboarding



SPRINT 2 Nov, 2017 Brand & Identity Development



SPRINT 3 & 4
Jan-May, 2018
Platform Development
(wireframe
development, creative
development)



June – August, 2018 Technical Development



SPRINT 11 & 12 Sept – Dec, 2018 Alpha –Phase 1 Pilot Testing (n=10)

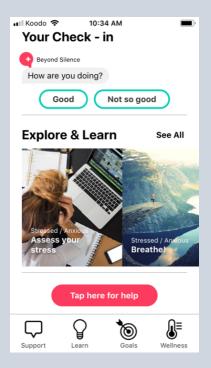


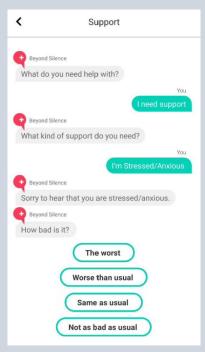
User Test
January, 2019
Beta Testing –
Phase 2
(n=25)

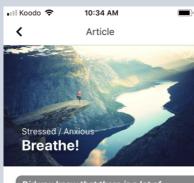


- Feedback and iteration
- Upgrades to app
- App code modified for Android platform

Overview of app







Did you know that there is a lot of evidence that mindfulness can help healthcare workers to not only focus and calm your mind, but can also reduce burnout and improve your relationships?

Here are different types of short meditations to get you started. Try one or more and make them a regular part of your daily routine!

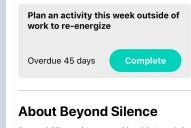
1) One-minute meditations:

Headspace.com Mindbodygreen.com

2) 3 minute breathing space

This approach involves counting to 3 to





11:48 AM

All Goals

Beyond Silence is a mental health 'coach in your pocket' for healthcare employees. It provides information and support for managing mental health at work, including support for you and to deal with coworkers. You can link directly to a peer mentor if you have questions. We do not provide counselling, but there are links to local and provincial resources. Information is private; employers cannot access personal information.

Terms of Service and Privacy Policy



∎⊩Koodo 🕏

Goals















Talk Directly to a Mentor

It can be helpful to talk to someone about your questions or concerns. Feel free to reach out to one of the people listed below who have agreed to be a Beyond Silence "mentor" for your organization. Mentors are not counsellors, but can help direct you to local resources for confidential, ongoing support. See below for email link - let them know who you are and that you are connecting from the app.



Connect



Beta Testing

- A purposive sample of 25 health care employees participated in testing of the iPhone prototype for 4 to 6 weeks (March 11th – May 13th, 2019)
- Pre/post surveys to track impact on mental health literacy (MHL-W), stigmatized beliefs (OMS-HC) and help outreach behaviours
- Paired t-tests to determine statistical significance
- Perceived quality of the app was evaluated using an adapted version of the MARS app evaluation tool ⁶
- Focus group discussion to explore issues in more depth (n=12 participants)

Beta Testing

- 25 participants –tested the app for 4 weeks
 - Family health team, nursing home, hospital, private clinic, public health
 - 72% women
 - An average of 15.6 years in health care (SD 10.8)
 - Roles in health care organization: clinical service (32%), non-clinical support (32%), manager/supervisor (16%), other (20%)
 - 92% of participants worked full time hours
- 64% used regularly (daily or a few times a week)
- Usage patterns varied:
 - Just played with the features
 - Used it at the end of the day
 - Used it in the morning before starting the day
 - Throughout the workday



Beta Test Results

Table 1: Pre & Post Data Results for Study Outcomes

Outcome	Baseline Mean (SD)	Follow-up Mean (SD)
MH Literacy	49.84 (13.6)	61.2 (8.8)*
MH Beliefs (Stigma)	41.6 (8.3)	41.1 (8.7)
Mental Health	5.24 (1.0)	5.28 (1.1)
Outreach Confidence	4.64 (1.6)	4.64 (1.5)
Outcome	Baseline (%)	Follow-up (%)
Outreach Behaviour	48	60

^{*} Significant at p < 0.001



Beta Testing – Focus Group Findings

Engagement:

• "I felt that if someone had it on their phone and they are feeling bad at the end of the day, they can go and feel more connected than they might otherwise"

Aesthetics:

"I liked the Wellness Gauge...you could move it over to see how you are doing...that was fun"

Information:

- "One of the things that you did very well was how to support the worker and it starts with how to talk, what questions to ask or even how to approach the topic"
- "It would be nice to have resources that are specific to our rural area"

Functionality:

• "It's very user friendly within all levels of our employees, they all found it very easy to use"

Impact:

- "You are not alone"
- "We are really focused on supporting patients and you can sometimes lose supporting your colleagues"

Subjective Quality

• 3.8/5





Organization Access

Each organization:

- Identify workplace champion
- Customization (links to internal policy documents, local resources, peer mentors)
- Support for implementation





App free to download

*Code provided for all employees to access



App as a COVID resource?

The most difficult issue we're hearing is the *crippling uncertainty and stress*. More than 50% of the frontline healthcare workers in Wuhan are now clinically depressed due to lack of support, PPE, etc., and a sense of betrayal by those in authority.

My wish is that these folks have access to mental health supports now and on the other side of this. One of the reasons we started this is because many healthcare workers do not have a culture that permits seeking therapy--and even when they do feel the need to seek help, they don't know how to find a therapist. Anything that destigmatizes psychotherapy would be a boon down the road--this could include data about mental health in frontline workers post-COVID in China & Italy but also post SARS

If we are not getting people support now we will see another pandemic of depression, PTSD, and somatic issues among frontline workers.

-Karen Dougherty - Ontario COVID-19 MH network



App as a COVID resource?

"Check-in" Pathways to support:

I'm stressed/anxious

Assess my stress/Breathe!/Recharge/Set Boundaries

I'm tired

Compassion Fatigue/Sleep strategies/Surviving Shiftwork/ Re-energize

I'm down/discouraged

You are not alone/Suffering & loss/Re-think & re-frame/ Get moving

I'm upset/angry

Calm/ Triggers/ Re-think & re-frame/ Talk about it

I'm scared/feeling unsafe

Difficult or dangerous clients/ Bullying or Harassment / PTSD/ Reach out



App as a COVID resource?

Resources:

- Guidelines for treating patients
- Guidance re: accessing/using PPE
- Links to policies, specialized education/support
- Links to peer mentors & professional supports
- Inspirational/thank-you messages

Scaling up – focus on priority organizations Funding to facilitate free access



Next Steps

- Interested in accessing app for your organization?
 - 3 month free license (May-August)
 - Open to all Ontario-based healthcare organizations
 - Priority: small, under-resourced organizations (eg. LTC)
 - Capacity needs to be determined
- If interested, need an "organizational champion" who will lead implementation process

Contact: <u>beysilen@mcmaster.ca</u>



Next Steps

- Interested in developing content?
- Ideas for funding?
- Interested in accessing app for your organization?

Contact: beysilen@mcmaster.ca

molls@mcmaster.ca



Questions/ Comments?