

# Transforming Suicide Prevention Through Education, Innovation and Technology

Five experts discuss the challenges and Opportunities



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Suicide prevention is about procedures and policies



35% ↑

Increase in suicides  
from 1999-2018

## The problem

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Rising suicide rates represent a public health crisis.<sup>1</sup> According to CDC data, rates of suicide increased 35% from 1999 to 2018. A statistic that forces us, as a country, to evaluate the efficacy of our nation's suicide prevention efforts. Despite this sobering fact, there is good news. Advances in technology and access, some spurred by the pandemic, are creating new opportunities to address this problem.

A panel of suicide prevention experts gathered in November of 2020 to discuss those opportunities via webinar. The expert panel included:

**Dr. Moutier**, Chief Medical Officer, American Foundation for Suicide Prevention

**Dr. Tony Pisani**, Associate Professor of Psychiatry and Pediatrics at the Center for the Study and Prevention of Suicide at the University of Rochester, New York

**Dr. Tom Insel**, Mental Health Czar for the State of California and CEO of Humanest

**Dr. Christy Esposito-Smythers**, Professor and Licensed Clinical Psychologist George Mason University and Inova Health System

**Dr. Whitney Black**, Psychiatrist and Quality Medical Director for the Department of Psychiatry at Oregon Health & Science University (OHSU), and Clinical Advisor for Owl Insights, moderated the panel.

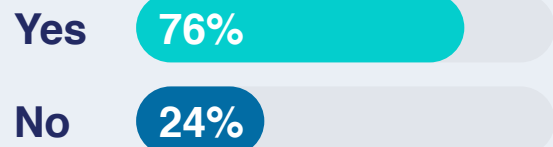
# Understanding the data and current state strategies

Understanding suicide prevention during the COVID-19 pandemic requires evaluation of the dynamic between pre-pandemic risk factors and more specific pandemic risk factors (e.g., isolation, economic loss). Recent surveys by the CDC indicate increased rates of stress, anxiety, and depression triggered by the COVID-19 pandemic.<sup>2</sup> Their recent report indicates that between 10% -11% of respondents reported experiencing suicidal ideation within the previous 30 days.

For contrast, rates of suicidal ideation in primary care populations are commonly estimated to be between 2.4-3.3%.<sup>3</sup> This speaks to the need for a national public health strategy to address this crisis. During the webinar, Dr. Tom Insel suggested we need to create a system of care that meets people where they are. "Rather than waiting until there's a crisis, where someone has already arrived in the emergency room, if we had been able to get there in a moment of need, at the time and place where they were willing to engage...we may have been able to manage the situation - before there was a crisis." This situation acknowledges the reactionary nature of our current system and the need to develop a more proactive system.

Identifying risk starts with establishing a framework. Webinar participants were polled with the following question:

***"Does your organization have a standard process and/or policies in place to systematically identify people at risk for suicide through screening and assessment?"***



n = 109

# Additional risks identified during the COVID-19 pandemic

How to identify the warning signs of a developing crisis and ensure access to resources is a complicated problem to solve, but the science around suicide risk and prevention is evolving. Dr. Christine Moutier commented on her research in this area - describing how the COVID-19 pandemic may increase risk through its effects on a number of well-established pre- pandemic suicide risk factors.<sup>4</sup>

Citing challenges such as the economy, the opioid crisis, and social media, she noted it is important to ask, “Where is the evidence for strategies that could be employed and need to be scaled at state and national levels to mitigate the risk that COVID is very likely pressing upon mental health distress and the other socioeconomic factors?” Even the rise in alcohol sales and gun sales – these things say to us, in the suicide prevention field – that there is a moment of heightened risk, but there’s also incredible opportunity, now that the dialogue has opened up on a national scale to start talking about how everybody is feeling because we’re all feeling stress and strain.”

Pointing out that suicide is complex, but also a preventable cause of death, Moutier said “clinicians and health systems have a pivotal role to play.

Even for all the very important suicide prevention roles played at the community level, ultimately when someone is detected as at risk, everyone is instructed to do the same thing, which is to connect the at-risk

person with their primary care provider, emergency department, or mental health professional.” Indeed, healthcare visits represent a significant opportunity to detect suicide risk and provide interventions.

***“Clinicians and health systems have a critical role to play [in suicide prevention.]”***



# A need to bridge gaps between touchpoints

Meeting patients where they are was a common theme during the webinar. Approximately 38% of individuals make a health care visit within one week prior to a suicide attempt, with the majority of these visits occurring primary care.<sup>5</sup> These visits represent an opportunity to intervene just as one would for those at risk for stroke or other health conditions. Yet, access to care and evidence-based treatments remains challenging. Insel stated, “Where we’ve really failed is on the continuity piece, and this is what other countries do much better. We don’t have a kind of active, continuous, comprehensive care system for people who have made an attempt to ensure that they’ll never make another attempt.” Creating this type of system would require numerous shifts including improving access to care, training providers in suicide prevention and culturally responsive care, and scaling to meet the needs of our communities.<sup>6</sup>

Providers need more suicide prevention education to effectively detect and treat risk. Pointing out the gaps in our system and provider education, Black asked, “How do we train providers across the healthcare spectrum in order to close the research-to-practice gap and create a more efficient, effective system for suicide prevention in healthcare? And does technology play a role?” Dr. Anthony R. Pisani’s work spans the prevention continuum and his observation has been that education creates paradigm shifts – like the one that dramatically decreased deaths in automobile accidents starting in the 1970s. People had to shift

their attitude toward safety and accept measures such as seat belts and safer roads. Community organizations like Mothers Against Drunk Driving (MADD) changed attitudes and influenced policy. We need a national, scalable strategy to address the key components of suicide prevention. “As we improve our measurements, as we make them more real time, how do we then prepare ourselves to cooperate with the data?” he asked. “We are moving into an era where we will get better predictive models and improved screening that doesn’t just depend upon one person’s report but will pull in other variables as well. But we really need to be thinking about how we cooperate with that data. How do we work alongside the robots essentially to provide that human connection? What you do matters, but how we do it matters more. I think a lot of the education can focus there.”

Identifying risk starts with establishing a framework. Webinar participants were polled with the following question:

*“Does your organization provide standardized suicide prevention education to all providers, including non-behavioral health providers?”*

Yes 61%

No 39%

n = 109



# Democratizing mental health

Continuously engaging people even when it's logistically challenging – and even when it takes care providers out of their usual brick and mortar clinic – will be key to reversing suicide trends. Insel described his hopes for a system “where people can get pulled into care and stay in care rather than having a crisis- driven care system, which is what we have today. It's really hard to bend the [suicide rates] curve with that kind of a system.”

Dr. Whitney Black agreed: “We all want this for our patients – this democratizing of mental health – but it's been hard to do, getting people access that works for them via telehealth or new applications. I think about how very important it is that patients get peer support or group support because our clinics are open from 8:00 to 5:00 but life keeps going and so do the stressors.”

The Veterans Administration's REACH VET program is doing good work in this area, Dr. Anthony Pisani said. The program employs predictive modeling and medical record data to identify Veterans at highest risk for suicide.<sup>7</sup> “And they use that to provide outreach,” he said, “instead of waiting for people to come in. In first efforts, they don't yet see that it's had an effect. But as a health system, the VA has tons of data that might be informative.... There's still a firm boundary right now between something that is in the health system, in healthcare provision, and then people's health outside of that system. I really like the idea of ‘Can we blur that a little bit?’ so that health is what we're really focused on – not whether it's happening in a healthcare system or elsewhere.”

The Anxiety and Depression Association of America reports more than 90% of American adults say that mental health is as, or more important than physical health. However, this has not translated into the majority of people with a mental health condition actually receiving the care that they need.<sup>9</sup>

*“The great news is that through technology, measurement-based care can be delivered using measurement feedback systems that are cloud- based and allow for assessments to be completed electronically via smartphones, tablets, or even computers, which makes the job of the clinician and the implementation of measurement-based care that much easier,” Esposito-Smithers said. “The Owl is a prime example of this. From our perspective at the Inova Kellar Center and the research at large, it's well worth the investment. There's clear research to suggest that measurement-based care does improve client outcomes when integrated with an evidence- based practice.”*

# Technology-enabled solutions and measurement-based care

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Technology offers a variety of solutions that may help providers meet patients where they are and improve continuity. For example, a technology enabled measurement-based solution, facilitates tracking of patient symptoms both at and in between visits, while also reducing burden on providers. Measurement-based care is an evidence-



based practice that involves the systematic administration of symptom rating scales and the use of the results to drive clinical decision.<sup>8</sup>

Further, merging the practice of measurement-based care with technology facilitates ongoing use of this evidence-based practice in the telehealth environment while collecting data for future analysis to inform population health strategies. In essence, these platforms allow the collection of patient-reported outcome measures (PROMs) as well as feedback from families, parents, and teachers via a cloud based application. Some providers are using measurement-based care as a proactive tool to monitor patients' symptoms severity and suicidal ideation between appointments, allowing them to provide more proactive than reactive care.

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***“There’s clear research to suggest that measurement-based care does improve client outcomes when integrated with an evidence-based practice.”***

**Christianne Esposito-Smythers**, chief medical officer of the American Foundation for Suicide Prevention

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# Supporting care and connection

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In her work at OHSU, Dr. Whitney Black has experienced the practical application of this idea. “Through our application of measurement-based care, through the Owl at OHSU, we developed a suicide care pathway in several of our outpatient clinics. We’re continuously monitoring our patients through measurement-based care, through the administration of specific measures like the C-SSRS, PHQ-9, PHQ-A, even in between appointments.”

Dr. Christianne Esposito-Smythers shared her experience with how tech-enabled MBC facilitates data integration into the clinical encounter by automating the collection, tracking, and monitoring of PROMs for

patients and sharing results with the care team.

“For example, if a kid comes in and you see a significant increase in suicide risk, as a result of one of the assessments she completed, the treatment planning team can know it’s time to focus more closely and decide if a higher level of care is needed, more frequent sessions perhaps, which would significantly improve the quality of care for that child,” Esposito-Smythers said.

Research shows that suicidal thinking can fluctuate significantly from moment to moment, indicating a need for ongoing assessment outside of the clinic visit.



# Reducing reactivity in the system

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In her work at OHSU, Dr. Whitney Black has experienced the practical application of this idea. “Through our Referring again to her institution’s work, Black explains that at OHSU, a social worker is consistently monitoring the system, so that when a patient is flagged as potentially having increased risk, someone reaches out to check-in with the patient.

“The social worker then contacts that patient to check-in with them and say, ‘Hey, what’s going on? Are you doing okay? Any new stressors? Do we need to move up your appointment? Do we need to get somewhere for some crisis care? Let’s do some brief safety planning,’” she said.

*“The really beautiful thing about that,” she continued, “is that it also serves as a caring contact, which I think might be the most important part. If someone’s home and alone, especially during the pandemic, they know that someone is thinking about them, that within the same day of completing an assessment, they got a call back because someone’s worried and thinking about them.”*

**Dr. Whitney Black**, Psychiatrist and Quality Medical Director for the Department of Psychiatry at Oregon Health & Science University (OHSU)

# Finding new ways to make connections

Suicide prevention is about procedures and policies and setting a framework but it's also about helping patients feel connected with providers and the community. A key goal is to avoid creating in them the feeling that they're only feeding information into a system, merely "ticking a box," as Pisani put it. Accessibility is important from a logistical and an emotional standpoint. Moutier said she'd like to see more ways our system is "almost in your face, in terms of incorporating connection into our daily lives. Cognitive retraining, distress tolerance, mindfulness techniques, and treatment for psychiatric conditions are packed with evidence and promise for reducing suicide risk. But our issue has been the actual implementation in a way that's based in the tools that we have across and through our lives."

1 <https://www.cdc.gov/nchs/products/databriefs/db362.htm#:~:text=From%201999%20through%202018%2C%20the%20age%2Dadjusted%20suicide%20rate%20increased,year%20from%202006%20through%202018.>

2 <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6932a1-H.pdf>

3 <https://www.ncbi.nlm.nih.gov/books/NBK137739/>

4 <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2772135>

5 Ahmedani BK, Stewart C, Simon GE, et al. Racial/ethnic differences in health care visits made before suicide attempt across the United States. *Med Care*. 2015;53(5):430–5.

6 <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2772135>

7 <https://www.research.va.gov/currents/0918-Study-evaluates-VA-program-that-identifies-Vets-at-highest-risk-for-suicide.cfm>

8 <https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201500439>

9 <https://adaa.org/survey-finds-americans-value-mental-health-and-physical-health-equally>



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