



# Surfacing the *unspoken*

Kintsugi is creating and optimizing AI technology to *proactively identify depression and anxiety in a scientific and scalable way* to close gaps of care.

## Awards and Accolades:



**FIERCE 15**  
2023 WINNER



National Science Foundation  
WHERE DISCOVERIES BEGIN

FROST & SULLIVAN  
LEADER IN VOICE BIOMARKERS  
FOR MENTAL HEALTH

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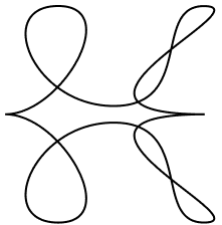
# Agenda

.....  
Introductions  
.....

The challenge  
.....

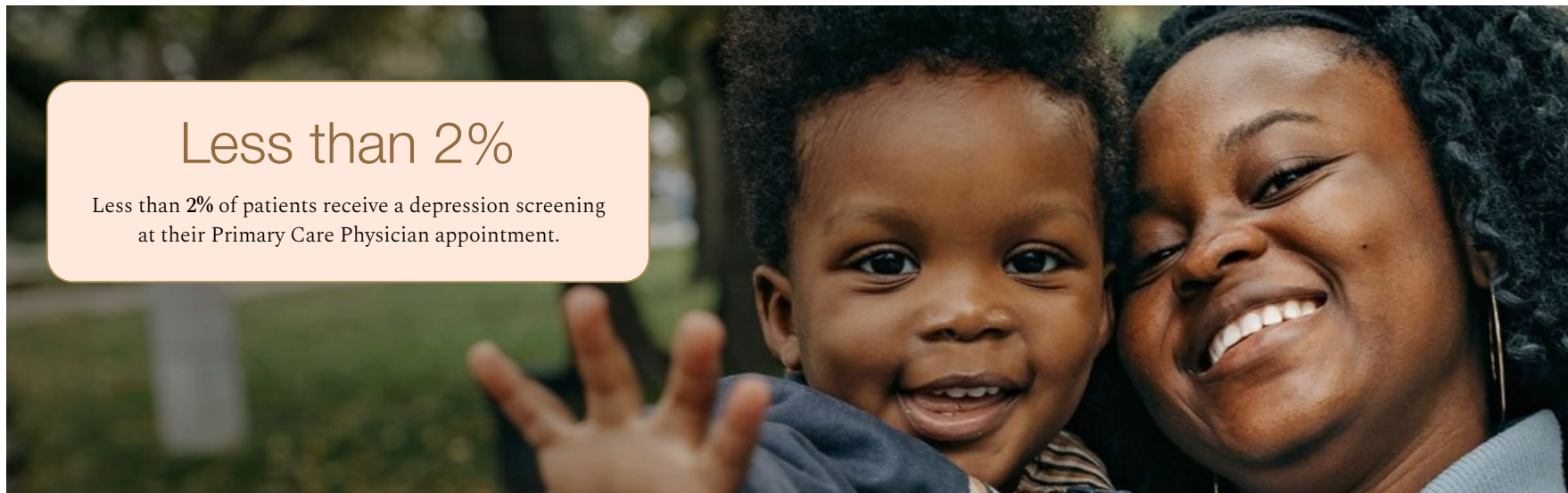
Our solution: Kintsugi Voice  
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Next Steps  
.....



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Today, our friends, family, and colleagues struggle *unnecessarily* to get access to mental healthcare with devastating consequences.



Less than 2%

Less than 2% of patients receive a depression screening at their Primary Care Physician appointment.



Yet, 2 out of 5 people struggle with mental illness each year in the U.S....

And leads to \$200B+ incremental costs across payers and providers from untreated depression



# Introducing Kintsugi

Kintsugi is developing **deep learning voice AI** that identifies mental health conditions with signal processing from voice biomarkers, built on an API platform that enables enterprise partners to seamlessly screen, triage, treat, and monitor those in need.

2019  
founded

\$28m  
funding

20K  
patients screens

## Awards, Partners, and Select Customers



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LEADER IN VOICE BIOMARKERS  
FOR MENTAL HEALTH

Peer reviewed



Microsoft  
for Startups  
Pegasus Program



Optum



## World Class Investors

**INSIGHT**  
PARTNERS

Jeff Horing, Scott Barclay

**:crew**

Vishal Lugani, Asad Khaliq

**SIDE DOOR**  
VENTURES

Andrew Batey

**PRIMETIME**  
PARTNERS

Alan Patricof, Abby Levy

**Angellist**

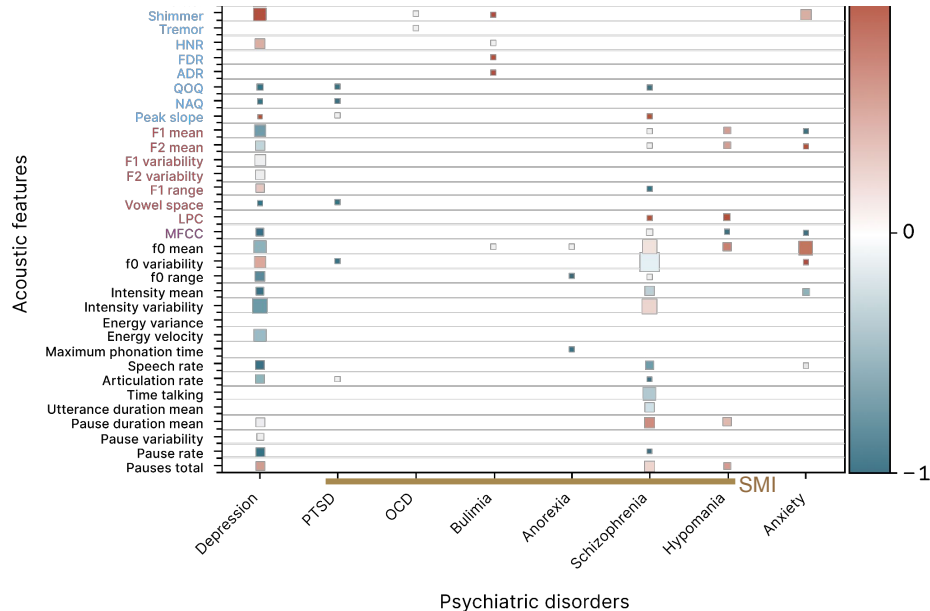
Rishi Narang

**techstars**

Matt Miller, PhD



With the advent of machine learning, Kintsugi Voice harnesses the power of AI to analyze biomarkers in people's voices to quantify mental health conditions



## WHAT MAKES KINTSUGI UNIQUE

### 30-Seconds Free Form Speech

Kintsugi Voice does not require specific questions or text to produce a result in real time

### System Agnostic

Kintsugi Voice's flexible API enables hundreds of workflows from retrospective to live in-call scoring

### Language Agnostic

Kintsugi Voice detects voice biomarkers for depression and anxiety based on how a patient speaks (not NLP)

### Largest Annotated Patient Model

Kintsugi Voice's AI model represents over 40k patients verified by Psychiatrists >7 years experience



National Science Foundation  
WHERE DISCOVERIES BEGIN

Severe Mental Illness (SMI) drives \$317B in annual cost according to the American Journal of Psychiatry

# AI voice biomarker tools have the power to transform the mental health landscape with countless benefits

## KINTSUGI BENEFITS



### OBJECTIVE

Assists clinicians with picking up the subtle cues of voice to quantify conditions.



### NON-INVASIVE

Embeds into existing clinical workflows and works off free form speech.



### FAST

Predicts results in under one minute.



### REDUCES BIAS

Language agnostic, scores based on *how* you speak, not *what* you say.



### STRATIFICATION

Predicts severity of conditions (Low, Moderate, Severe).



### CONNECT TO CARE

More precise triaging prioritizes most severe patients for care.



### QUALITY METRICS

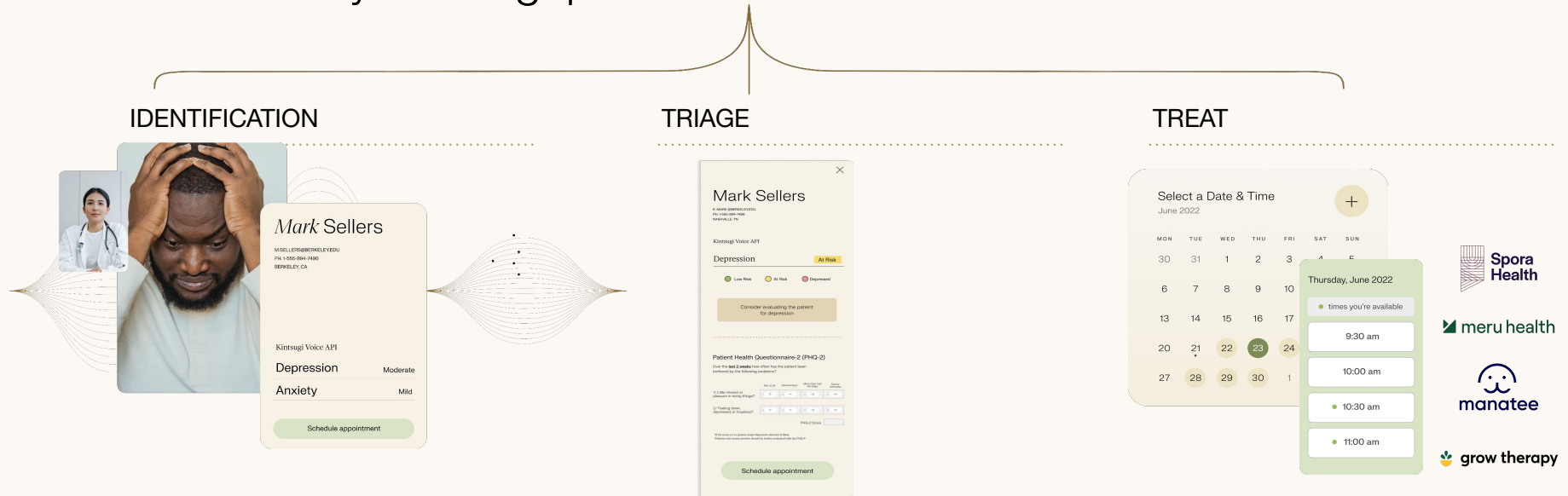
Identify and track mental health score over time.



### OUTCOMES

Boost patient outcomes and profitability for healthcare organizations.

# PRODUCTS Kintsugi is a flexible end-to-end behavioral health solution that can scalably fill the gaps in mental healthcare with a focus on:



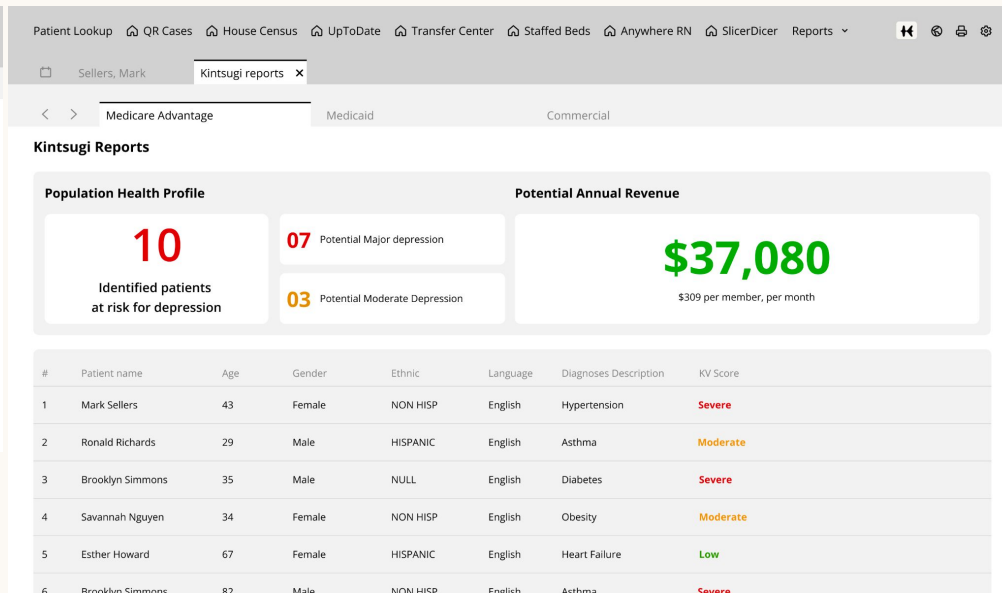
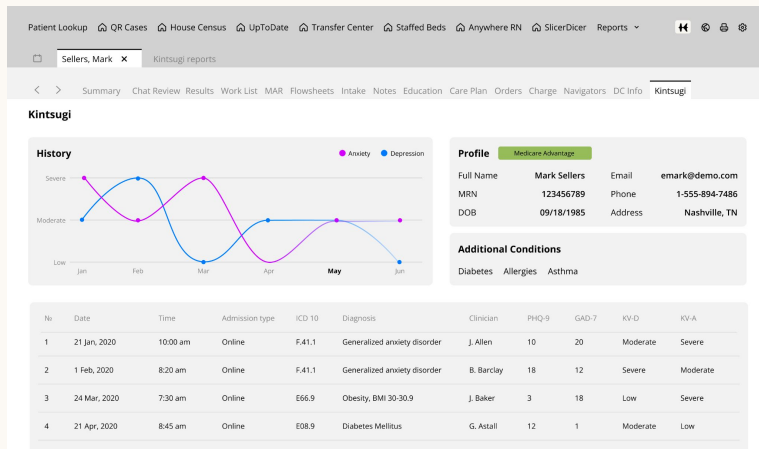
Kintsugi Voice allows seamless early identification of signs of depression and anxiety in both live and retrospective clinical workflows.

Within 30 seconds, Kintsugi Voice displays stratified Depression and Anxiety results, aiding clinicians to recommend tailored treatments plans based on severity.

Kintsugi can integrate into existing clinical workflows with scheduling to BH resources or provide scheduling into our Clinical Partners where there are bandwidth issues.



# RISK STRATIFICATION streaming data augmentation for BH



Kintsugi Voice enables depression and anxiety longitudinal tracking for high risk patients and...

In aggregate, provides a key risk input for effective population health management across all CCM call center calls and telehealth appointments.

Today, we are integrated into Zoom, Genesys, and Five9 call center stacks.





# Kintsugi can seamlessly and accurately risk stratify, triage, and track clinical depression and anxiety at scale by leveraging voice biomarkers



## USE CASES

### Clinical Workflows

### Wellness Workflows

#### 01 Virtual Care

#### 02 Care Management

#### 03 RPM, Companion Apps

#### 04 Retrospective

#### 01 Employer & Employee



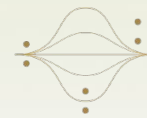
- Primary Care
- Behavioral Health
- Telehealth consults
- Ambient scribes



- Call Center
- Care Coordination
- Population Health
- Maternal Health
- Recently Discharged
- House Calls/AWVs



- Digital App
- AI Chatbot
- Medication Adherence
- Medication Titration
- Voice Memo
- Voice journaling
- Remote Monitor



- Historic Audio Data
- Depression acuity
- Depression prevalence
- Anxiety acuity
- Anxiety prevalence



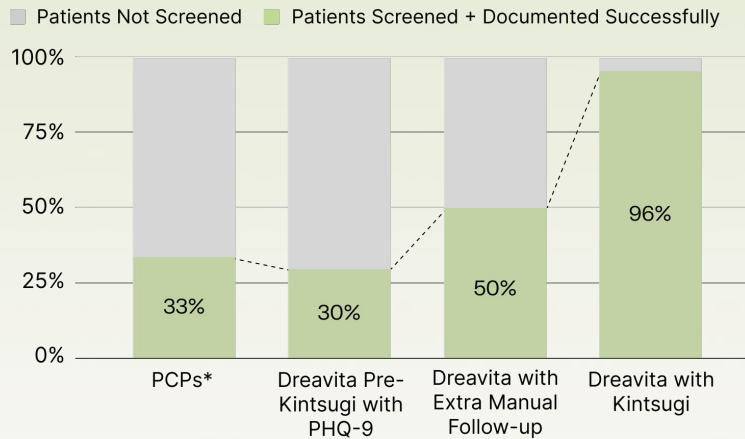
- Wellness Portal
- Navigator Chatbots
- Virtual Meetings



# Kintsugi has shown the ability to screen patients for depression at scale with high accuracy



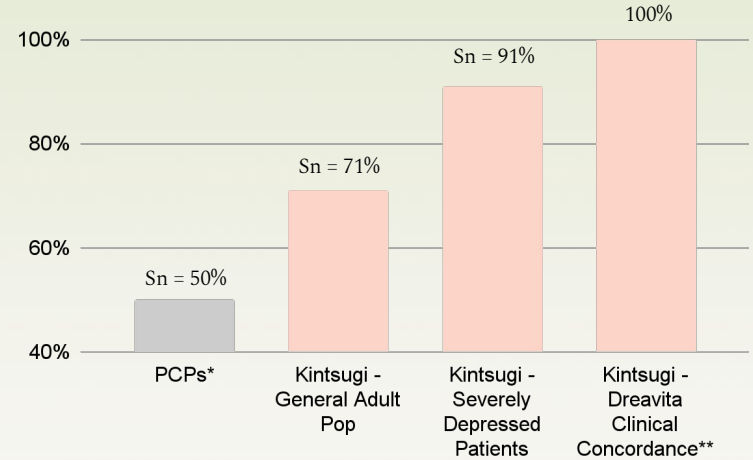
Dreavita BH practice has significantly increased successful patient screening rates using Kintsugi



\*Primary Care Physicians (PCPs) report that they only screen and document patients suspected of having depression ~33% of the time. Mitchell et al. 2009, Lancet. Clinical diagnosis of depression in primary care: a meta-analysis<sup>2</sup>.

In the last 3 months, **Dreavita has completed 330 successful screens** using Kintsugi Voice.

Kintsugi has demonstrated accuracy of correctly identifying depression that exceeds primary care



\*Primary Care Physician (PCPs) Sensitivity across 19 studies. Mitchell et al. 2009, Lancet. Clinical diagnosis of depression in primary care: a meta-analysis<sup>2</sup>.

\*\*Concordance between Kintsugi Voice results and Dreavita clinician assessments.

NOTE: Sn = Sensitivity.



# Recent clinical trials validate ability of Kintsugi models to identify depression by analyzing brief voice responses



[Link to Article](#)

14,898

Respondents self-reporting moderate to severe depression (PHQ  $\geq$  10)

0.71 | 0.73

Sensitivity | Specificity for correctly identifying moderate to severe depression with 95% confidence interval.

UAMS

UNIVERSITY OF ARKANSAS  
FOR MEDICAL SCIENCES

[Link to Article](#)

1,645

Respondents self-reporting severe depression (PHQ  $>$  20)

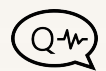
0.91

Sensitivity for correctly identifying severe depression with 95% confidence interval.

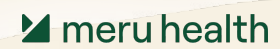
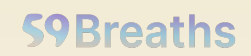
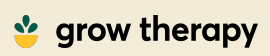


# Kintsugi is trusted by leading brands

## KINTSUGI VOICE



## KINTSUGI CONNECT



## CHANNEL PARTNERS



# Connect with us!

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