

The Problem

2024 KEY FINDINGS

OF ADULTS EXPERIENCED A MENTAL ILLNESS IN THE PAST YEAR. EQUIVALENT TO NEARLY 60 MILLION AMERICANS.

5% OF ADULTS **13%** OF YOUTH

REPORTED EXPERIENCING SERIOUS THOUGHTS OF SUICIDE.

2022 HAD THE HIGHEST NUMBER OF DEATHS BY SUICIDE EVER RECORDED IN THE U.S.



1 IN 5

YOUTH HAD AT LEAST ONE MAJOR DEPRESSIVE EPISODE (MDE) IN THE PAST YEAR.

OVER 1/2

(NEARLY 3 MILLION YOUTH) DID NOT RECEIVE TREATMENT. OF THOSE WHO DID RECEIVE TREATMENT, ONLY 65%

SAID IT HELPED THEM.

18%

OF ADULTS IN THE U.S. HAD A SUBSTANCE USE DISORDER IN THE PAST YEAR.

77%

OF THEM DID NOT RECEIVE TREATMENT.

1 IN 4

ADULTS WITH FREQUENT MENTAL
DISTRESS COULD NOT SEE A DOCTOR
DUE TO COST, A 2% INCREASE OVER
THE LAST REPORT.

10% OF ADULTS

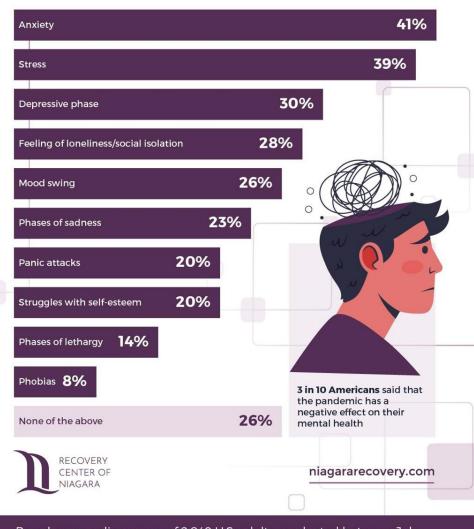
8.5% OF YOUTH

STILL HAVE PRIVATE INSURANCE THAT DOES NOT COVER MENTAL HEALTH.

THERE ARE 340 PEOPLE FOR EVERY I
MENTAL HEALTH PROVIDER IN THE U.S.

Majority of Americans Have Struggled With Mental Health

% of U.S. respondents who have experienced the following mental health issues in the past 12 months.



Based on an online survey of 2,049 U.S. adults conducted between July 26 and August 10, 2021
Source: Statista Global Consumer Survey



On-Campus Counseling



Crisis and Emergency Resources



Online Therapy



Peer Support Groups



Mental Health Apps

Existing methods require medical experts and diagnosis is often delayed

What about parents, family members, and friends?

How can they provide the necessary support and encouragement?

Self-diagnosis i.e. without consulting a medical professional is not recommended, then, what are we suggesting?



TALKING POINTS

Mayo Clinic uses AI to achieve breakthrough in diagnosing cancers



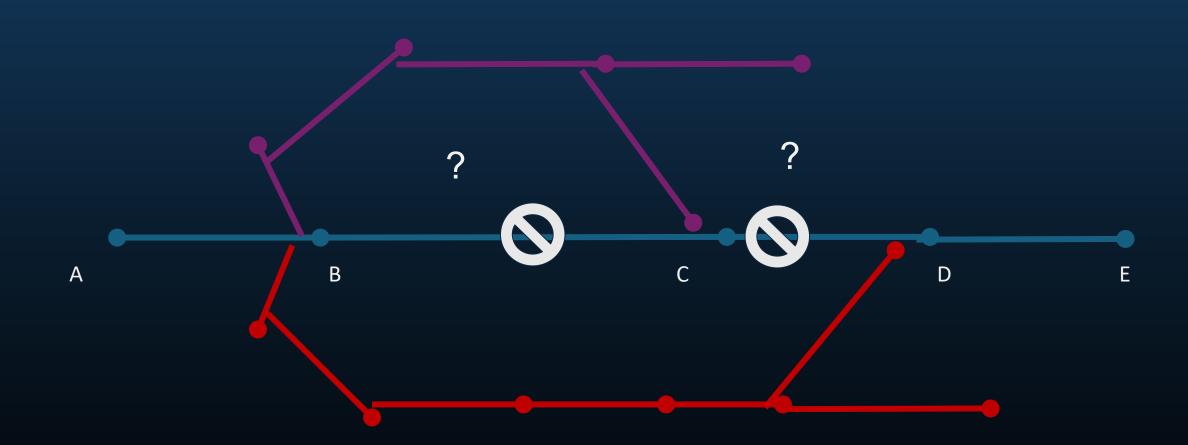
By Esme Murphy, Liz Christy
July 31, 2025 / 4:00 PM CDT / CBS Minnesota

tests have shown AI can detect cancers 438 days earlier than conventional methods, and that means catching the cancer earlier!

- We want to enable and complement medical professionals, parents, family members, and friends, who can proactively identify signs that can improve diagnosis and treatment
- With the help of data and AI based on scientific research and applications we can do this faster and better

How are we planning to do it?

Al can be used for early detection using the most basic instrument i.e. 'daily life decision making', be it as simple as choosing a certain form of transportation, or a certain route, and so forth because every little decision and behavior indicates our state of mind



Proposed Solution

- Interactive gaming (AR/VR) and observe the choices of the player (with their permission)
- Quantify the decision-making in terms of RL and Bayesian inference.
- Express mental measurements as explore-exploit balance working memory
- Immediate or long-term future reward
- Balance of stimulus i.e. new information vs prior beliefs
- And many similar scientific methods

The more the data, the faster the diagnosis and the better the treatment & quality of life

References:

- Dolan RJ, Dayan P. Goals and habits in the brain. Neuron. 2013 Oct 16;80(2):312-25.
- Strauss GP, Waltz JA, Gold JM. A review of reward processing and motivational impairment in schizophrenia. Schizophrenia bulletin. 2014 Mar 1;40(Suppl_2):S107-16.
- Daw ND. Of goals and habits. Proceedings of the National Academy of Sciences. 2015
 Nov 10;112(45):13749-50.