



# Innovation with Purpose

Preventing Suicide with Data-Driven Innovation

# An Urgent Need

## IN 2022

45,979 people died by suicide in the United States.

That is **1 death every 11 minutes\***.

**12.2 Million**  
adults seriously thought about suicide

**3.2 Million**  
adults made a plan

**1.2 Million**  
adults attempted suicide

For every suicide death, there are **4** hospitalizations for suicide attempts

\*Source: <https://www.cdc.gov/suicide/suicide-data-statistics.html>

Suicide is a leading cause of death in the United States. Public health organizations are seeking data-driven solutions to facilitate early identification and intervention for individuals at risk of suicide.

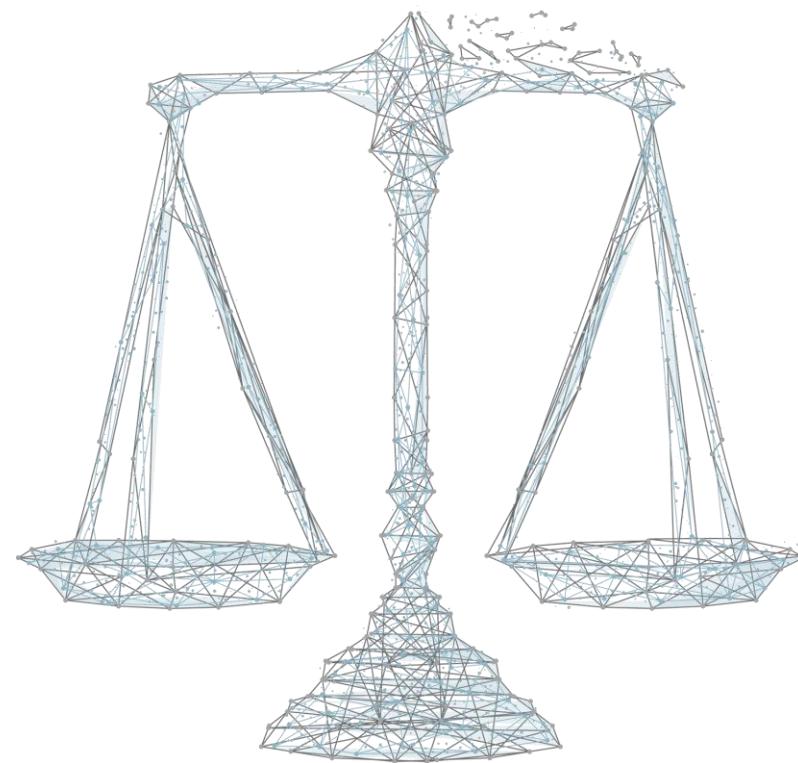
Cognosante has developed a scalable, repeatable, and interoperable approach to:

- Identify individuals at elevated risk of suicide before they are in crisis; and
- Advise local resources on optimal outreach timing and methods based on individual preferences

# Our Approach

Our approach utilizes ethical, clinically valid risk prevention analytics to enhance real-time prevention and responsive interventions that are locally accessible to individuals at risk.

First developed for Veterans, this approach offers actionable insight to reduce risk across communities, including college students, young adults, individuals with substance abuse disorders, or those experiencing financial hardship.



# Our Solution



## Build a Virtual Representation of an Individual at Risk

- Leverage Cognosante's Data Ecosystem to harness multiple, disparate data sources
- Get existing data in one location
- Enhance with unique data sets

## Perform Advanced Analytics to Create a Risk Score

- Derive a personal risk score for the Representative Human based on known behavioral characteristics
- Create an Attitudinal Profile identifying best intervention time and method based on known communication preferences

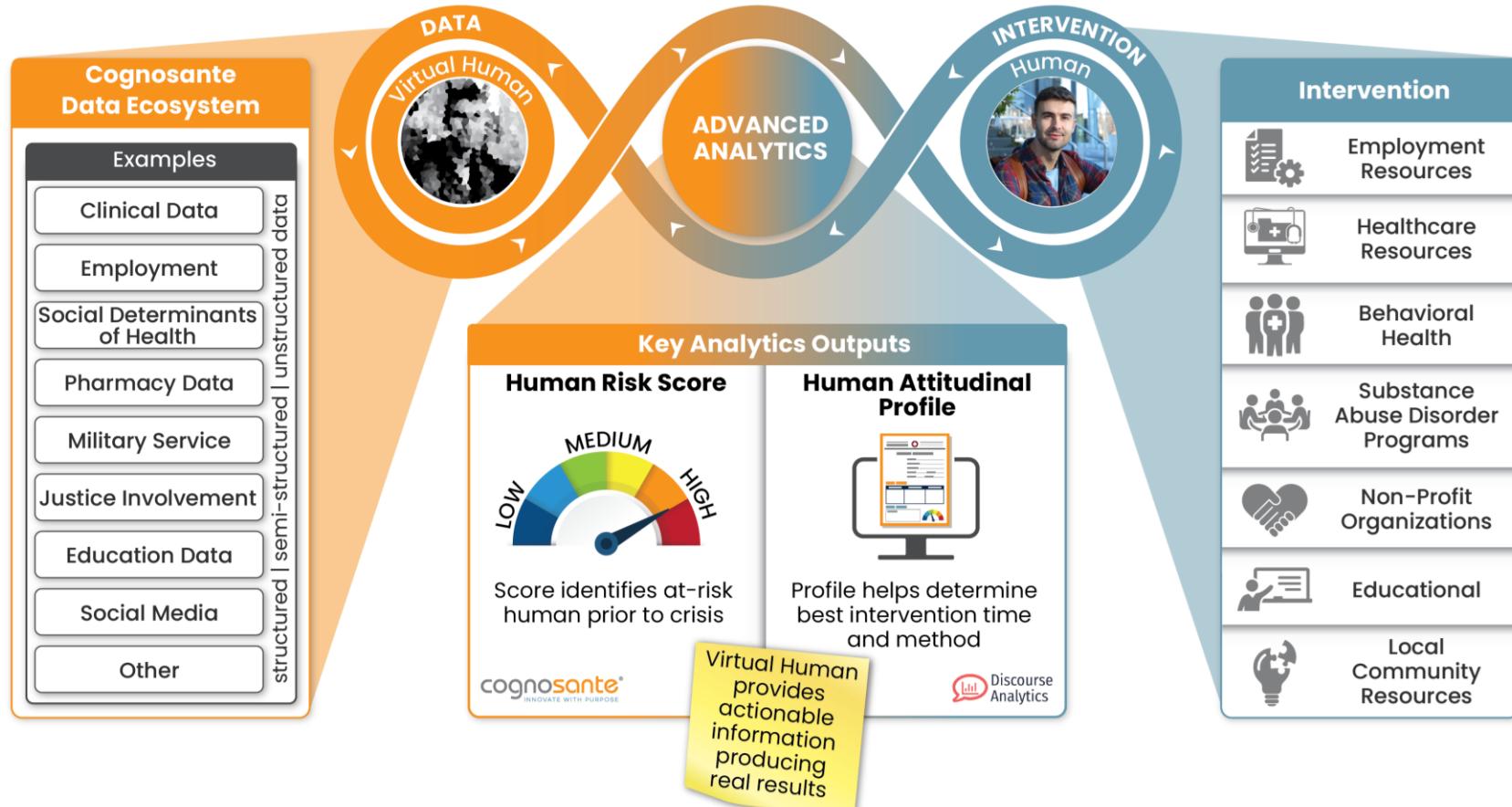
## Surface Advanced Analytics to Front-Line Resources for Intervention Action

- Make risk score and the attitudinal profile available to trained, approved local professionals through secure data interfaces

## Cycle Intervention Outcomes Back into Virtual Representation for Continuous Learning

- Virtual Human integrates data from any data source and any data type

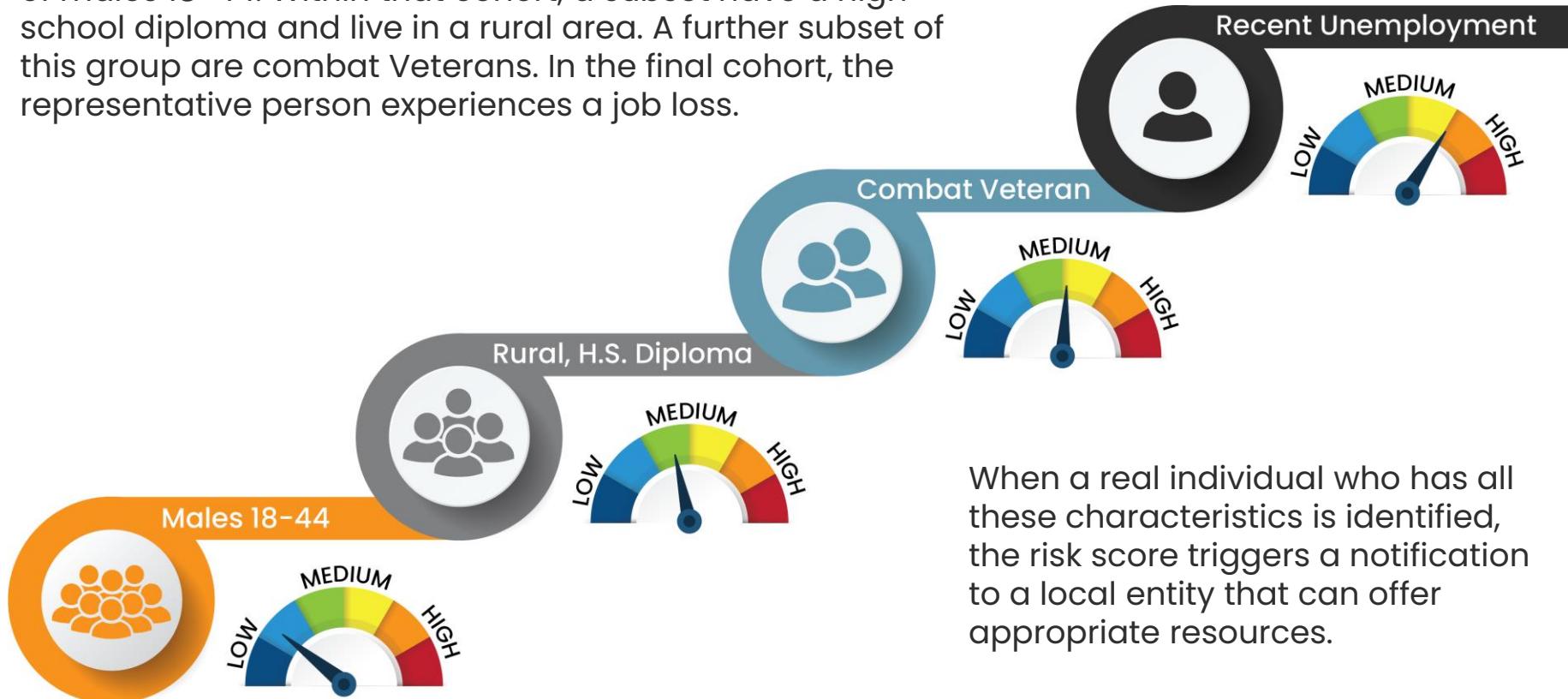
# Our Solution



Individuals have the right to grant or withhold consent for sharing information.

# Example 1: Calculating Risk Scores

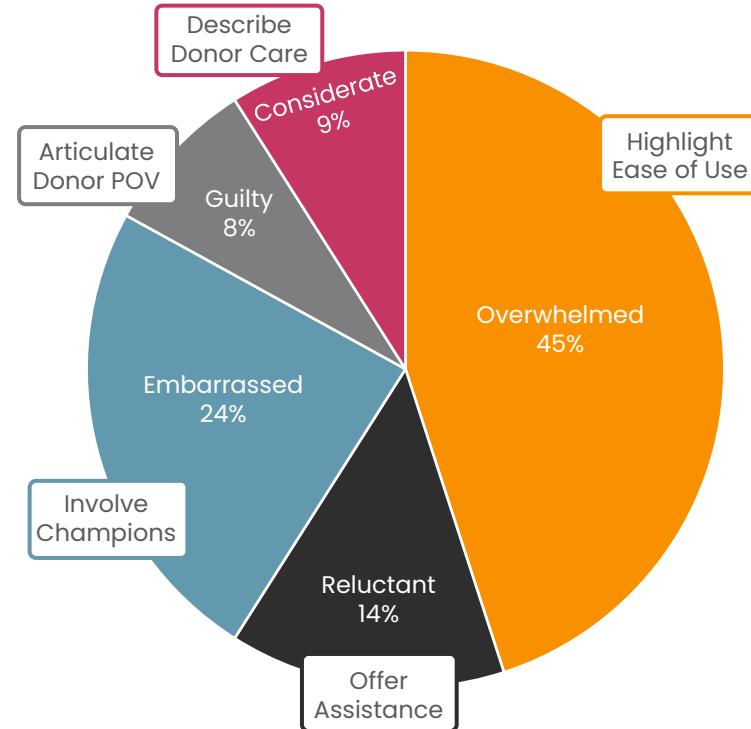
In this example, the risk score for a representative person increases with each factor. We start with a profile cohort of males 18-44. Within that cohort, a subset have a high school diploma and live in a rural area. A further subset of this group are combat Veterans. In the final cohort, the representative person experiences a job loss.



# Example 2: Applying Attitudinal Profiles

Discourse Analytics maps behavior to attitudes to prescribe a “nudge” that drives people to take an action. The power of this approach is illustrated in this use case at Johns Hopkins.

- The Johns Hopkins Healthcare Systems Organ Transplant Group used attitudinal profiles to address organ shortages for live transplants.
- To address recipient reluctance to reach out to potential donors, Discourse Analytics built personalized profiles of individual recipients.
- The system recommended appropriate outreach strategies to overcome the reluctance at individual levels driving higher levels of participation in organ donation.



# Contact Us!

Connect with our Data and Analytics team to explore opportunities to tailor this approach to the populations you serve. Our experts can work with your unique data and connect you to funding resources.

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# A Partnership for Prevention

Our analytics solution is the result of a partnership among entities with expertise in the Government, Healthcare, Defense, Technology, Science, Research, and Education industries.



Cognosante is a mission-driven technology company delivering innovative and transformative solutions that improve the health and safety of Americans. With more than a decade of experience working with state and Federal government agencies, we aim to expand access to care, improve care delivery, deliver solutions addressing social determinants of health and ensure safety and security through multi-faceted technology and customer experience (CX) solutions. Our broad range of capabilities includes enterprise IT and cloud, data science, telehealth, interoperability, public health surveillance, clinical performance, eligibility and enrollment and consumer engagement.



Discourse Analytics is the market leader in the use of Artificial Intelligence to improve empathetic engagement for change. Discourse Analytics empowers communities to activate data, converting it into insights that can positively influence an individual's behavioral response to their environment.