Big Data, Big Impact: For Americans and Vets

There is probably no other industry that uses big data more than healthcare. In this business, <u>data and numbers</u> can literally mean life or death.



This is certainly the case in Michigan, where CNSI just recently built a proof-of-concept for an opioid addictionidentification tool. The recent story in MedCity News shares how predictive analytics using Medicaid data will help identify outliers that may be indicative of addiction behavior. Given that there are 78 deaths from opioid-related overdose in the U.S. every day, this type of analysis has the power to leverage technology to solve a very human problem.

This is especially vital when we look at our Veterans. According to Veterans Affairs officials about 60% of Veterans returning from the Middle East and 50% of older Veterans suffer from chronic pain. Today U.S. veterans are twice as likely to die from accidental opioid overdoses than nonveterans. Understanding the power of big data is one step in supporting our honored veterans suffering from chronic pain, depression, and substance abuse. Here are some great examples where big data is making a big impact for our nation's heroes:

• <u>The Durkheim Project</u>: The development of linguistic-driven prediction models to estimate the risk of suicide in U.S. Veterans

• <u>The Million Veteran Program</u>: The collection of genomic, clinical, environmental and other health data to link the role of genes in disease, post-traumatic stress disorder (PTSD), cancer and substance abuse.

• <u>The MYnd Analytics Study</u>: The measurement of brain waves to help doctors fine tune treatment plans for PTSD patients

In all of these instances, the most effective solutions began by asking, "What are we trying to solve?" followed by "how can we use data to solve it?" We are proud to be part of an industry dedicated to answering those tough questions through innovation in order to positively impact the health of Americans.