

# Penn State Increases Access to Data, Enhances Research Efforts by Joining TriNetX Research Network



## Customer

Penn State College of Medicine and Penn State Health Milton S. Hershey Medical Center, part of the Penn State University system



## Challenge

Penn State wanted to gain access to large patient data sets to increase research opportunities and enhance collaboration both within the university and outside with the wider research community



## Solution

Penn State joined the TriNetX Research Network to gain access to deidentified data of over 68 million patients from 49 healthcare organizations (HCOs)



## Results

In the first six months after joining the network, Penn State has dramatically increased research efforts, downloaded nearly 30 data sets, published four studies, and applied for three informatics grants, none of which would have been possible without TriNetX

Penn State College of Medicine is a national leader in pursuing basic, clinical, translational and health services research. Penn State is ranked in the top one percent of the world's universities, and the College of Medicine boasts a portfolio of nearly \$100 million in funded research. The College of Medicine and its academic medical center, Penn State Health Milton S. Hershey Medical Center, educates more than 1,700 medical, graduate and nursing students and trainees at its Hershey campus and a regional medical campus in State College.

## Dealing with an ongoing struggle to get data

One of the issues faced by Penn State in its informatics research efforts was the inability to get large enough volumes of relevant data.

*“We have always had the expertise here at Penn State, but our struggle was getting data to conduct the level of advanced research we wanted,” said Avnish Katoch, research informatics project manager, Penn State Clinical and Translational Science Institute. “Our researchers were always looking for data and didn’t want to wait months to get it.”*

Approximately 1.5 million Penn State Health patient records are available for Penn State researchers to query on the TriNetX platform. To conduct more wide-ranging research involving larger geographical coverage and more diverse patient populations, Penn State scientists required access to much larger amounts of data.

“Penn State is known for science, technology, and engineering informatics,” said Katoch. “We needed to get the data to unleash the full power of our researchers beyond what we could accomplish with our internal data set.”

TriNetX provided a solution to access large data sets from a greater number of organizations.

## Looking to TriNetX to solve the data access issue

As a member of the National Center for Advancing Translational Sciences' Clinical and Translational Science Award Program, Penn State was using TriNetX Live as a way to access its own data for research. When it became clear that the university's researchers needed access to more, Penn State Clinical and Translational Science Institute leadership proposed expanding the relationship and joining the TriNetX Research network. This decision provided Penn State with access to more than 68 million de-identified patient records.

Penn State researchers were also looking for more opportunities to collaborate with others in the research community within their own organization.

“*Collaboration in research is key and a major focus of the Clinical and Translational Science Award Program. Joining the larger TriNetX Research network gives us an opportunity to expand our research community,” said Katoch.*

### Penn State reaps huge rewards with TriNetX

Joining TriNetX Research has significantly increased the ability of Penn State researchers to conduct more outcomes-based and epidemiological research. They have come to know how easy it is to get data to do their work. In the first six months of joining the network, Penn State researchers have downloaded nearly 30 separate data sets.

TriNetX Research provides a world of opportunities to Penn State investigators,” said Neal Thomas, Associate Dean for Clinical Research at Penn State College of Medicine.

“*Penn State Clinical and Translational Science Institute works to make the research process more efficient at the university. TriNetX Research fits the institute’s mission well and its large set of real-world data enables our investigators to answer research questions more efficiently. TriNetX Research provides us with a tool that can assist Penn State researchers in the important process of translating research into new treatments and interventions.”*

As a result of access to the TriNetX Research Network data, Penn State has enhanced its ability to apply for and obtain grants and publish research papers, gaining added visibility for the university and its researchers. In the first six months after joining the Research Network, university researchers have published four papers including one in The Lancet titled, [Diabetes, Drug Treatment and Mortality in COVID-19: A Multinational Retrospective Cohort Study](#).

Access to the large data sets in TriNetX has also allowed the university’s informatics team to apply for three different grants, something that would have been extremely difficult to do without TriNetX.

### Penn State looks to the future with TriNetX Research

“*Our relationship with TriNetX is awesome,” Katoch summed up. “Everyone on the TriNetX team is helpful and responsive. If I have questions, I get immediate answers, often within minutes.”*

The views represented in this article are of the individuals and do not necessarily represent the views of Penn State.

### About Penn State College of Medicine

Located on the campus of [Penn State Health Milton S. Hershey Medical Center](#) in Hershey, Pa., [Penn State College of Medicine](#) boasts a portfolio of more than \$100 million in funded research. Projects range from development of artificial organs and advanced diagnostics to groundbreaking cancer treatments and understanding the fundamental causes of disease. Enrolling its first students in 1967, the College of Medicine has more than 1,700 students and trainees in medicine, nursing, the health professions and biomedical research on its two campuses.

### About TriNetX

TriNetX is the global health research network that connects the world of drug discovery and development from pharmaceutical company to study site, and investigator to patient by sharing real-world data to make clinical and observational research easier and more efficient. TriNetX combines real time access to longitudinal clinical data with state-of-the-art analytics to optimize protocol design and feasibility, site selection, patient recruitment, and enable discoveries through the generation of real-world evidence. The TriNetX platform is HIPAA and GDPR compliant. For more information, visit TriNetX at [www.trinetx.com](http://www.trinetx.com) or follow [@TriNetX](https://twitter.com/TriNetX) on Twitter.