Squark ®

Case Study

UPMC Uses Augmented Intelligence to Identify Target Patients by Speciality with Squark

UPMC LIFE CHANGING MEDICINE

Industry:
Healthcare

Use Case:
How to effectively reach potential patients of specific specialty areas

"The data and the models help us deliver the care at the right time and the right place to the right person in most effective way possible. We don't use our own patients' individual data and we don't violate privacy, that is sacred."

Most importantly, "The patients who get transplants or other successful treatments are very glad we reached out to them."

- Jake Collins, Director of Marketing Intelligence

Background:

Clinicians and administrators at the University of Pittsburgh Medical Center (UPMC) wanted to market a specific program, living donor liver transplant (LDLT) services, to those who might benefit from them. The challenge was that there is a very narrow group of individuals who might qualify for the program - and how to identify them while complying with HIPAA guidelines. UPMC maintains a robust national consumer database with over 1,500 variables on each individual, but how could they go about identifying the individuals and the predictive variables associated with liver disease in a quick, cost-efficient, and repeatable manner.

The Transformation:

If the team were to build a predictive model themselves, it would take expensive monetary resources and six months to do the required analysis. However, the Director of Marketing Intelligence, Jake Collins, had another idea for better identifying potential patients, using a pre-built technology to build and run the models. As a solution that focuses on being a cost-effective option that democratizes automated prediction with no-code data science, Squark was the best fit for UPMC. Other options were either too costly, not powerful enough, or primarily built for data scientists.

The Results: "Phenomenal"

- 99% increase in response rate (from 1 in 10,000 to 1 in 75)
- Added 50% more traveling patients to the liver transplant program
- Decreased time to results from 6 months to 1 day

A UPMC-employed data scientist "checked the math" of the initial model to ensure the data were being run and interpreted correctly. Now, based on the initial work by the Marketing Intelligence team, anybody on the team with a basic understanding of statistics can run their own predictive projects. As a result, the team can now do hundreds of projects a month, allowing them to quickly test and iterate on their ideas. For example, they are currently working on projects for pancreatic cancer and musculoskeletal programs.