

Drug Diversion Prevention: Building a Nationwide ML-Powered Detection System

THE SITUATION

Controlled substance diversion — the redirection of prescription drugs from legitimate medical channels — was difficult to detect and prevent through manual oversight. As J&J prepared to expand its controlled substance portfolio, including the launch of Spravato (esketamine), a scalable, data-driven prevention capability was needed to meet FDA requirements and protect patients broadly.

WHAT WE DID

Led a team of 30+ to design and implement a nationwide drug diversion prevention system using machine learning, data science, and advanced analytics. Managed a \$7.5M budget over five years. Built detection capabilities that evolved with each new controlled substance launch and met FDA readiness standards for Spravato. Maintained governance and compliance alignment across the program lifecycle.

OUTCOME

Delivered a functioning ML-based diversion prevention capability supporting every new controlled substance launch over five years. Met FDA readiness requirements for Spravato and contributed to broader patient protection across the portfolio.