Case Study

Emergency Telehealth and Navigation (ETHAN)

GROW ASSOCIATES

Client	City of Houston
Project	Implementation of Emergency Telehealth and Navigation (ETHAN) for the Houston Fire Department (HFD) as an independent, sustainable, and replicable platform
Objective	The objective of ETHAN project was to optimize emergency response resources and improve patient outcomes by reducing unnecessary ambulance rides and overcrowding in hospital emergency departments (EDs). GROW was engaged to migrate ETHAN to the Microsoft Teams platform and revamp the Synapse platform with heightened security measures, with the goal of transferring ownership to the City of Houston for independent management. This upgraded iteration of ETHAN sought to extend its reach beyond the city, offering a viable solution for patients with non-emergency conditions, guaranteeing access to appropriate and timely medical care across various geographic areas.
Strategy	The GROW team offered strategic guidance to the City of Houston in establishing an autonomous platform for ETHAN. Our firm • Successfully managed the re-platforming of ETHAN to Microsoft Teams, a more secure, reliable, and cloud-based platform. • Rebuilt the Synapse application source code, allowing the City of Houston to manage and maintain it independently. Additionally, GROW implemented a data extraction system from insurance companies, expanding the data pool. This enabled doctors to recommend alternative healthcare facilities within the network to non-emergency patients. • Provided strategic advice to support the business case for ETHAN's evolution into an independent tool that can be replicated in other regions facing similar emergency healthcare challenges. • Created comprehensive training materials, user guides, and workflows were developed by GROW and delivered through live, hands-on training sessions for end-users of the Synapse application. • Offered ongoing maintenance support, data migration, and monitoring services during off-operating hours for the ETHAN platform.
Results	The integration of ETHAN with Microsoft Teams and upgraded Synapse application resulted in significant outcomes: **Reduction in unnecessary ambulance rides-** A remarkable 90% of patients were able to utilize alternative transportation methods, effectively reducing the reliance on ambulances. This alleviated the burden on emergency response resources and reserved ambulance services for life-threatening emergencies.

	Enhanced patient outcomes - By enabling preliminary examinations through video conferencing, emergency physicians could provide timely medical recommendations. This facilitated better coordination of care and appropriate treatment for patients, ultimately leading to improved outcomes. **Cost savings -** The program successfully diverted non-emergency 911 calls away from ambulance rides and emergency department visits, generating substantial cost savings. Patients benefited from reduced medical bills, and hospitals and insurance companies also experienced decreased expenses. The cost-effective nature of the ETHAN program demonstrated the potential for significant savings within the healthcare system. **Efficient data analysis -** The Houston Fire Department (HFD) was able to analyze operational data and medical oversight, fostering continuous improvement in their processes. The successful implementation of ETHAN with Microsoft Teams by the Houston Fire Department exemplified the transformative power of telehealth solutions in emergency medical services. The project not only improved patient care and reduced healthcare costs but also garnered attention and interest from the medical community nationwide. ETHAN serves as a model for other emergency medical service systems, showcasing the substantial cost savings and operational advantages achievable through the integration of innovative technological solutions.