The section of emergency medicine offices occupy academic and administrative offices housed on the campus of Texas Children’s Hospital within the Texas Medical Center and in close proximity to the Ben Taub General Hospital (4 city blocks). Within this complex of 50 offices is a separate Pediatric Emergency Medicine Research Office that occupies 6 offices and a conference room. Research administration, coordinators, secretarial personnel, information technology personnel, and database specialists are housed in these offices. The physical layout of offices within offices allow for the provision of security of confidential patient information in either paper or computer form. Human Subject data, once collected in the emergency department setting are then processed and stored in these offices and are accessible only to key research personnel.

Texas Children's Hospital (TCH) also houses an enterprise network of departmental local area networks consisting of: over 150 server systems running 10 different operating systems; over 2000 PCs (30 of which will be available to the project investigators for collection, processing and storage of subject data); and over 4000 client users. TCH supports these systems array with: 24 hours/7 days a week monitoring of systems, applications and network; system backups, restores, and print requests; routine equipment maintenance; trouble reporting and escalation procedures; monitoring of environmental conditions and problem reports. The emergency department utilizes an EMSTAT point of service electronic tracking and record system that allows identification of study patients from office-networked computers in real-time. This allows project research coordinators to be alerted when potential study subjects present to the emergency department. This system tracks many demographic variables exported into databases that will also allow researchers to periodically review time-of-day presentations to restructure allocation of research coordinators time and resources in order to maximize their surveillance for study subjects.

The Section of Emergency Medicine also operates Teleform© for automated scannable data entry into specific research databases (Microsoft Access and Excel platforms). Additionally, with Teleform’s© enhanced electronic forms module, research administration design automated electronic data collection forms for data collection. This enhancement allows for secure distribution of electronic data collection tools via e-mail and/or web page for subsequent secure transmission of data directly to project databases. The infrastructure created by all of these systems will allow maximal efficiency of research.