

CTV Emergency Treatment Allocation System (ETAS)

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The New York State Department of Transportation (NYSDoT) is in the process of installing 42 Closed Circuit Television Cameras (CCTV) along major roadways in the region where motor vehicle crashes are prevalent. Cameras in this system can be manipulated by NYSDoT personnel to focus on particular areas of the highway and include pan, tilt and zoom capabilities. We are now accessing the NYSDoT transmission signals in accordance with their policy: *Traffic Engineering and Highway Safety Division, Policy for the Design and Operation of Closed-Circuit Television (CCTV) in Advanced Traffic Management Systems, September 2, 2001.*

The ability to monitor and view real time images, which include accident footage, extent of damage and scene treatment, may provide a wealth of information to both pre-hospital and ED personnel. It would provide real-time information indicating the exact mechanism of injury suffered by any patient involved. We also seek to demonstrate that this will subsequently lead to different, individualized, and even better treatment regimens. It would also enable adequate personnel to be appropriately allocated in preparation for the receiving of victims, rather than attempting to estimate what might constitute sufficient numbers and space.

While surveillance-type camera systems are a ubiquitous part of American life, little attention has been paid to the utility of these systems as an adjunct in medical decision-making. It is therefore appropriate and necessary to study the potential emergency medical applications of the NYSDoT CCTV system. Potential benefits to the emergency care system include; appropriate EMS response allocation, more accurate ED resource allocation, more aggressive trauma care and a greater understanding of mechanism of injury by ED personnel. Finally, we would expect that the availability of CCTV imagery of crash scenes to ED and trauma physicians could change treatment protocols to more specifically address the exact mechanism of injury as suffered by the patient.