

Flynn, Andrew, "Emergency Response to Traffic Accidents in Rural Costa Rica. An Evaluation of the Paramedic Capabilities of the Costa Rican Red Cross to Respond to Traffic Accidents in Guápiles, Limon, Costa Rica." Advisor: Dr. Freddy Ulate. Macalester College. 2010. 41pp.

This project studies traffic accidents in a rural area of Costa Rica and the people charged with providing emergency medical care to the victims. Specifically it profiles the demand for paramedic services and assesses the capabilities of local emergency responders to provide these paramedic services. The area studied was the town of Guápiles, located in the Limon region of Costa Rica. The emergency responders were the members of the Guápiles committee of the Costa Rican Red Cross, who provide basic and paramedic care to the surrounding area. At the committee there is only one permanent paramedic who works for twelve hours during the day from Monday to Saturday. Two months were spent interviewing members and observing the response to traffic accidents and other emergency calls in order to assess the capabilities of the Guápiles committee. Additionally, information about more than six-hundred traffic accidents from the past twenty months was collected in order to profile the accidents of the area and the demand for emergency response. Special attention was paid to accidents with critical patients. These accidents were then analyzed to see if there was a relationship between accident frequency and time of day. There was a strong relationship and model functions were fitted to the data in order to determine the times of day with the highest frequency. The paramedic's current shift does not match the predicted shift with the highest accident frequency. Information gathered from interviews and observations established the importance of a paramedic and exposed a number of problems with the emergency response, specifically during the times of the week when paramedics were not working. The best twelve-hour shift to cover the areas of the day with the highest accident frequencies was identified, and a series of recommendations was made to improve the paramedic response to traffic accidents in the area.