

“Communication Problems as a Determinant of Slow Response Times in EMS: An Economic and Policy Analysis”

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Abstract

The economics literature shows that rapid responses from emergency service providers increase the likelihood of clearing crimes for the police and saving lives for the ambulance. However, very little is known about the determinants of response time. When driving to the scene of an event, the responder relies on the information transmitted during the emergency call. Because of the shock and the hit of the moment, the communication may have been unclear or inaccurate, resulting in localization problems. In this paper, I quantify the localization problem by making use of a difference-in-differences identification strategy. First, I look at the difference between driving times at the mission level: on the way to go, the directions are provided by the caller; on the way back, the location of the hospital is known by the driver. Then, I compare the difference across type of places: public locations are easier to be identified than private dwellings. Using high quality administrative data, I document that the localization problem accounts for 5 minutes of delay, 30% at the average driving time. The magnitude of the effect does not change with the distance travelled by the ambulance, characterizing this as a “last mile” problem. The delay is smaller for non-urgent missions, when the caller is likely to be less stressed and communicates more clearly.