Asymmetric Information Sharing in Dialysis Paratransit Using an Agency Approach

Abstract

The provision of dialysis patient transit services presents an agency problem (Eisenhardt, 1989) where the local counties provide the paratransit, non-emergency paratransit vehicles, yet the funding sources include federal, state, and local resources. The county paratransit operator is the agent that provides the principal, the dialysis center, with the work of transporting dialysis patients to their centers under conditions of incomplete and asymmetric information. The agent (paratransit) collects riders in need of paratransit services for doctor appointments, dialysis appointments, and other transit needs. Scheduling pickups with a limited number of vehicles in counties creates scheduling and routing problems for the paratransit agencies who are expected to provide dialysis patients to the dialysis centers and other medical appointments at appointed times. Asymmetric scheduling information between the dialysis centers (principal) in a county, the para-transit authority (agent), and the patient’s knowledge of his/her schedule is the focus of this research. If a patient is not ready for a paratransit pickup or a paratransit vehicle misses or is late for a dialysis patient pickup this can have a cascading effect on these inter-related actors for the para-transit schedule, to other patients, to the dialysis clinics, on to receiving reimbursement for this transport. This research will seek to identify ways to improve the communication flows particularly in rural areas with fewer scheduling technologies than the urban areas. Results of this field research and analysis can provide specifics on this information asymmetry and the resulting problems which can provide specifics to be used to solicit the for-profit dialysis chains to provide support for communications/scheduling technology to improve the provision of dialysis transport.

CATM Research Affiliates:
Mary Lind (NC A&T: Lead)
Rhonda Hensley (NC A&T)