Dialysis Treatment and the Impact on Transportation Services for Patients

by David Murray

Chronic kidney disease affects more than 2,325 Kansans, and in 2006 approximately 89 percent (2,073) of them regularly received treatment at a dialysis center, up to three times a week (ESRD 12 2006 Annual Report, 5). Many dialysis patients are dependent on public transportation to get to treatment centers, and they have special scheduling needs due to the nature of those treatments. This article provides some information about kidney disease, the challenges facing dialysis patients in obtaining treatment due to access to transportation, and examples of how some Kansas rural transit systems are trying to meet the challenge.

The number of dialysis centers in Kansas has almost doubled since 1993, from 24 to 47 currently. However, a dialysis patient can obtain treatment in their home county in only 27 of 105 counties in Kansas. Gaining access to dialysis treatment is a huge challenge for those living in the remaining 78 Kansas counties that do not have a treatment facility. According to Betty Vega, East Wichita Dialysis Center social worker, while patients from rural counties do use public transportation to access service, service is difficult because some providers do not offer service outside their own county. For patients living in northwest Kansas, the only option for dialysis treatment is in Hays—as far as 180 miles away!

Types of Dialysis and Where They are Conducted

Performing the tasks of healthy kidneys, dialysis removes wastes from the body, helps to control blood pressure, and ensures that appropriate levels of vital chemicals remain in the patient’s body.

There are two general types of dialysis. Peritoneal dialysis is performed several times a day, and it is typically administered at home. The other form of dialysis, hemodialysis, filters one’s blood outside of the body using an artificial kidney machine. Hemodialysis is performed in a clinic and accounts for nearly 90 percent of dialysis treatment (Medical Transportation: Toolkit and Best Practices, 71).

The Patient’s Experience

Dialysis treatment is typically performed several times per week, and it lasts between three and four hours. The treatment is said to be relatively painless, but the process may cause patients to experience a drop in blood
pressure and feel weak following treatment. The reduction in blood pressure can also make patients feel nauseated. Patients often need assistance returning home following dialysis treatment.

**Transportation Needs and Challenges**

Reliable transportation is necessary to ensure that dialysis patients have access to their treatment centers, and that they have it regularly. Finding adequate roundtrip transportation to dialysis centers is a great concern to patients and providers alike. Many patients currently rely on personal vehicles driven by family and friends, taxis, paratransit service, and where available, other public or nonprofit transportation providers for this service.

In a study conducted in Delaware, it was found that less than 50 percent of dialysis patients use private vehicles to access treatment (Denson, 91). Although we do not have comparable research to identify travel modes to dialysis in Kansas, we suspect that a significant percentage of our state’s dialysis patients rely on several sources for their transportation as well.

Vega estimates that 40 percent of the patients receiving treatment at the East Wichita Dialysis Center use public or private transportation providers to access treatment. She estimates that another 30 percent travel with family or friends and about 30 percent drive themselves.

In a survey assessing problems experienced by patients attempting to access dialysis transportation, Pam Hawley, Transportation Program Field Representative for the North Carolina Department of Transportation, found that the primary barriers included prohibitive costs, riders being ineligible for transport services, insufficient operating hours, and depleted transportation provider funding (Sulek and Lind, 11). These mounting issues are of great concern for providers that are currently operating at service and financial capacity.

Recently, rising gasoline prices have imposed an increased burden upon family and friends to meet the transportation needs of dialysis treatment, and the weekly schedule associated with treatment makes it difficult for family members and friends to continually aide patients’ transportation needs. Likewise, rural transportation providers often do not have the resources to take a passenger to dialysis treatment two to three times per week and still provide service to riders for other trip purposes within their service area. The treatment length and distance to the dialysis center often requires the vehicle to be out of the area for an entire day.
Although transportation barriers vary based on the proximity to treatment facilities and availability of public services, increased collaboration between transportation providers and dialysis centers can help meet the needs. Kansas is lucky to have some form of public transportation in 90 percent of rural counties, which could and sometimes do collaborate in transporting these patients.

**More Demand**

**Special Needs**

Demand for public transportation to dialysis centers in the United States will continue to increase as a result of at least three factors, according to a study conducted in 2005. These factors include the Baby Boom generation approaching retirement, a decline in physical activity and increase in obesity rates, and a reduction in general health causing more patients to rely upon assistance to get to their appointments (Sulek and Lind, 1).

The frequency and length of dialysis treatment has made providing transportation a challenging process. Often the amount of time a patient receives treatment varies, and the unpredictable recovery time following treatment makes it difficult to schedule patient return trips. This makes it difficult for providers to assist other customers, or may cause exhausted patients to remain at the treatment facility far longer than in situations where pick-up time is predictable. In order to make use of available transportation services, some patients have had to reduce their treatment length, which can have a negative effect upon patients’ health (Rocco & Burkart, 1178).

**Financial Challenges**

A financial challenge that confronts some dialysis patients is that Medicare does not cover transportation to and from the treatment facility. Although Medicare covers the majority of the cost of treatment, the federal program only covers transportation expenses of patients requiring an ambulance. According to the Health Care Financing Administration’s Medicare Carriers Manual, “a person receiving outpatient dialysis is not ordinarily ill enough to require an ambulance” (Brown, 1). Therefore, local transit may be the only source of public transportation to a dialysis center.

In contrast to Medicare, Medicaid is a federal program that provides medical assistance to patients based upon financial need. In some cases this program can aid patients that require additional assistance with costs and transportation needs, and it often provides relief for rural Kansans.
Scheduling

Another factor affecting patient transportation is coordinating transit schedules and hours of operation with the dialysis center’s operating hours. Often, transportation service is available in the area, but the service times do not coordinate with the needs of patients. According to Bonnie Burgardt, Finney County Transportation Director, service hours in Finney County are being expanded in July. Although the longer hours will help, Burgardt stated that they still might not meet the needs of patients who start treatment in the late afternoon. With that said, the expanded hours will certainly help by providing one leg of the trip.

Helping Meet the Transportation Needs of Patients

A variety of steps can help transit agencies accommodate the increasing demand for rides by dialysis patients. Providers can work with dialysis center staff in scheduling rides. This can be accomplished by creating standing schedules that group patient trips together based upon geographical location and dialysis treatment time. This is the case in Harper County, where the transit agency provides roundtrip service to Wichita for dialysis treatment three times per week. Knowing that a vehicle is going to be used for dialysis treatment, the standing schedule helps Harper County Transit make arrangements for other passengers’ requesting local service. Grouped rides may help reduce the expense incurred in providing transportation scheduling and service. Additionally, the use of extended or alternative dialysis service hours can make transportation to and from the treatment facilities far easier. As in Finney County, the extended transportation and dialysis hours will help family members provide the return trip following treatment.

For communities exploring fixed route service, providing access to treatment centers may help reduce patients’ reliance upon demand response transit. Examples of fixed route service providing access to dialysis treatment are found in Garden City, Lawrence, and Topeka. Although patients may prefer paratransit service following treatment, fixed route service can serve one leg of the roundtrip, and help reduce the overall transportation costs for the community or the individual.

Dialysis centers may look to aid patients’ transportation needs by seeking funding from other sources such as the American Red Cross, American Kidney Fund, area agencies for the aging, and the National Kidney Foundation (Brown, 3). These funding sources can help offset the increasing cost of transportation.
Conclusion

Although providing dialysis patients with access to treatment is difficult in some communities, there are some strategies that have proven successful in aiding patients and transit providers. The use of standing schedules, prioritizing patient service during poor weather, and creating an open line of communication with dialysis center staff should help improve transportation accessibility (Sulek and Lind, 13). These practices will help improve access to the life-saving dialysis treatment. Providing Kansans with reliable access to dialysis treatment is a primary concern for transportation providers, and it is important to recognize that progress is being made.

Sources


Sidebar:

**What is Kidney Disease and How is it Treated?**

End Stage Renal Disease, or chronic kidney failure, results when a person’s kidneys no longer perform the work of healthy kidneys. Today, chronic kidney disease affects more than 26 million Americans, and an additional 20 million are at an increased risk of developing the disease (National Kidney Foundation Web site, 6/13/08). Nationally, the rate of kidney disease is increasing at a rate of roughly 6 percent. According to the Community Transportation Association’s Medical Transportation: Toolkit and Best Practices, 65 percent of End Stage Renal Disease (ESRD) is a result of hypertension or diabetes. As the kidneys lose their cleansing abilities, dialysis treatment may be employed to perform the tasks of healthy kidneys. This option is used when the patient has lost 85 to 90 percent of the kidney’s function (National Kidney Foundation Web site, 2/7/2008). Dialysis treatment is necessary because ESRD is fatal if not systematically treated.