Problem: Covid-19 emerged in the United States in early 2020. Patients with co-morbidities, such as ESRD, were found to be very susceptible to contracting the virus and since the virus was new, there was no information on how to properly care for this patient population. This created an opportunity for a performance improvement initiative in our organization.

Sample: The target population was the hospitalized hemodialysis patient in a large medical center as well as the hemodialysis personnel.

Methods: Daily shift huddles were held reinforcing standard dialysis infection prevention practices. Supply chain was involved to assure adequate personal protective equipment (PPE). Education on the proper use of PPE was frequently done in response to the Center for Disease Control (CDC) recommendations. Men with beards were asked to shave and N95 fit tested as PAPR gear was limited. Dialysis machines were dedicated for use on COVID-19 treatments and kept in a separate area. In between treatments the machines were disinfected per standard and a bleach disinfection was done at the end of the day. A Surfacide disinfection on the equipment was done at night. Coordination was done with the bed placement team to place patients in negative air flow rooms that would allow visibility & monitoring from outside the room. The nephrologist assessed patients daily for dialysis needs and treatment orders adjusted as needed to limit exposure. A surge staffing plan was developed. Treatments were done later in the day and a dedicated staff provided support when possible. Heparin protocols were adjusted to preserve the dialysis circuit.

Results: The bedside treatment volume doubled from 4-6 to 15-16/day, most being Covid-19 isolation. Over a three-month surge, 300 treatments were done on COVID-19 patients. To date, none of the dialysis personnel have tested positive for COVID-19, nor were there any nosocomial transmission among dialysis patients.

Conclusions: While there is much still to be learned about COVID-19, an increase in knowledge and experience in caring for this population has reduced anxiety and established a COVID-19 workflow in our department.