
Patrick O. Gee

KIDNEY360 2: 920–921, 2021. doi: https://doi.org/10.34067/KID.0002192021

The mounting out-of-pocket expenses of prescription medications for people living with CKD and their comorbid conditions can be overwhelming. When you consider patients with low and middle incomes, it can create worsening health outcomes because of the lack of available resources to assist them in this area. No one should have to make life-altering decisions about affording prescription medications and managing their quality of life.

Diabetes

One day at work in 2003, I was feeling exhausted and lethargic. I went to the medical department to get checked out. The attending nurse asked me if I had ever had my glucose levels checked. Her question was foreign to me, because I had not a clue to what she was alluding to. After explaining what glucose levels were, she took blood from my finger, and her next comment changed my life. The nurse told me my glucose level was 758 and I needed to go directly to the nearest hospital's emergency room. Upon being seen by the emergency room physician, he told me my A1c was 11.7 and diagnosed me with type 2 diabetes. Furthermore, the physician referred me to an endocrinologist for follow-up care. My physician told me I needed to lose weight and eat a healthier diet, but she never mentioned diabetes was the leading cause of kidney disease. The doctor also prescribed three different medications to help manage my diabetes:

- **Levemir**: insulin detemir, long-acting insulin, up to 24 hours in duration. Without insurance coverage, this insulin cost around US$448.99 per month for five flex pens. With insurance, I paid US$75.00 per month.
- **Novolog**: a rapid-acting insulin lispro. This insulin works quickly to lower glucose levels, and I used it before each meal. The average cost of this insulin without insurance is US$161.99 per three 3 ml of 100 unit/ml pens, per month, according to SingleCare.com. With insurance, this same medication ranges from US$77.67 to US$106.98, per month, depending on your pharmacy.
- **When you incorporate the cost of insulin with a pill form of diabetes drug (Metformin) at a monthly price of US$10.00 for a 30-day supply, my total was, on average, US$264.99 per month from 2003 to 2018.**

Dialysis Journey

April 2013 is when I received the news from my endocrinologist that I was at 30% kidney function. During my ten-year relationship with my doctor, they never told me that diabetes was the number one leading cause of kidney disease. Nor was it ever explained why I was diagnosed with declining kidney function at Stage 3b. December 1, 2013 was the day of my very first peritoneal dialysis exchange. It was a strange sensation of experiencing dialysate flowing from a bag into my stomach. It was an even more immense sensation trying to understand the cost of the medication prescribed to help me manage my kidney health. Unlike my diabetes management, now I must incorporate the new cost and management of kidney disease. In addition to my three diabetes medications, I was given nine other medications while on dialysis. They are:

- Erythropoietin (Epogen): treatment for anemia.
- Iron (ferrous sulfate): iron supplements work with anemia medication.
- Vitamin D: manage potential bone mineral loss (calcium and phosphorus).
- Phosphate binders: reduce the amount of phosphorus absorbed from food.
- B-complex vitamin and folic acid: help prevent infections and support or promote red blood cell growth, energy, good eyesight, brain function, good digestion, and nerve function.
- Topical creams and antihistamines: I was prescribed these creams due to my wound care and itching issues.
- Vitamin E: to assist with leg cramps that may occur at night.
- Lisinopril and Benazepril: both of these medications are Angiotensin-converting enzyme inhibitors and lower blood pressure.

At this point in my journey, I was now on a total of 12 medications to help manage my diabetes and kidney disease while on dialysis. With Medicare and supplemental private insurance, the cost of my monthly prescribed medications averaged US$376.23. Without any insurance, my prescriptions would have cost over US$4000 per month.

Transplantation

Through my dialysis facility’s tremendous effort, I qualified for the active transplant waitlist at my Department of Justice, Law, & Criminology, American University, North Chesterfield, Virginia

Correspondence: Dr. Patrick O. Gee, American University, Justice, Law, & Criminology, 6406 Phobus Drive, North Chesterfield, Virginia, 23234. Email: geepatrick50@yahoo.com

920 Copyright © 2021 by the American Society of Nephrology www.kidney360.org Vol 2 June, 2021
transplant center on February 16, 2016. On April 21, 2017, I received my new organ, but it was not functioning due to delayed graft function. Due to my new kidney not working correctly, I was undergoing 24 hours of hemodialysis every other day. During my transplant journey, I experienced several setbacks that the average transplant recipient may not endure. My experiences included a total of four surgeries (transplant, blood clot, hemorrhaging, and a laparoscopic-peritoneum window), hospitalized for 33 days, and my kidney did not begin to function until the 47th day. With these challenges came a plethora of medications to treat and manage my kidney health. In my transplant journey, I had to do away with some of the dialysis prescribed medications and begin my life on post kidney transplant medications. The following is a list of the medicines that my transplant nephrologist prescribed for me after my kidney transplant:

- Mycophenolate (CellCept): anti-rejection; cost US$226.56 per 30 tablets, 360 mg.
- Tacrolimus (Prograf): anti-rejection; cost US$71.96 per 30 tablets, 1 mg.
- Prednisone: anti-rejection; cost US$4.00 per 30 tablets, 5 mg.
- Amlodipine (Norvasc): hypertension; cost US$9.00 per 30 tablets, 5 mg.
- Nexium (Omeprazole): protect stomach/nausea; cost US$15.00 per 30 tablets, 20 mg.
- Metoprolol: hypertension; cost US$9.00 per 30 tablets, 25 mg.
- Gabapentin: diabetic neuropath; cost US$36.59 per 90 tablets, 100 mg.
- Lasix (Furosemide): treat fluid buildup; cost US$4.00 per 30 tablets, 20 mg.
- Senna: laxative to prevent constipation; cost US$8.12 per 60 tablets, 8.6 mg.
- Ciprofloxacin: antibiotic for stent; cost US$18.51 per 14 tablets, 500 mg.
- Nystatin: oral supplement (swish and swallow); cost US$26.88 per 1 tube, 30 mg of 10,000 unit/gm.
- Valganciclovir (Valcyte): antibiotic (for the first 6 months after the transplant); cost US$1537 per 30 tablets.
- Aspirin: blood thinner; cost US$7.25 per 30 tablets.
- Pravastatin: high cholesterol; cost US$12.22 per 30 tablets.
- Coreg (Carvedilol): hypertension; cost US$23.49 per 60 tablets.
- Chlorthalidone: hypertension and fluid; cost US$19.47 per 30 tablets.
- Magnesium oxide: cost, US$12.40 per 120 tablets.
- Neutra-Phos: preventing kidney stones and lowering the pH of the urine; cost US$43.53 per 100 tablets.

When you consider the socioeconomic status, comorbidities, age, sex, and geographical location, the cost of medications can vary for everyone. The financial burden of medicine can be stressful at times. Medicine is necessary to help treat kidney disease and the comorbid conditions that are associated with it. The cost of medications should not cause the poor, afflicted, and downtrodden to suffer even more due to lack of access to medical coverage, skyrocketing drug costs, and other limitations that prevent the most underserved communities from affording life-sustaining medications. I am grateful to be at a point in my life where I am no longer on as many medications as I was in the past. Yet, for those that are battling multiple comorbid conditions, I hope the cost of drug therapies is more affordable and accessible for all.

Disclosures
P. O. Gee reports having consultancy agreements with Project Tech; reports receiving honoraria from APOLLO APOL1 Long-term Kidney Transplantation Outcomes Consortium Community Advisory Council, Bayer International, CareDX, Center for Disease Innovation Patient Advisory Board/Kidney Research Institute Patient Advisory Committee, Patient Family Advisors Network, Otsuka Pharmaceutical Advisory Board, and Vertex International; reports being a scientific advisor or member of APOLLO Community Advisory Council, End Stage Renal Disease Network 5 Medical Review Board, FDA MedTech Color Collaborative Steering Committee on Health Equity in Medical Devices, Health Technology Improvement Foundation Health Equity Advisory Board, NephCure and Health Education and Literacy Collaborative Health Equity Steering Committee, NephCure International/HEAL Collaborative Patient Advisory Board, Otsuka Pharmaceuticals Advisory Board, and University of Washington Center for Dialysis Innovation Patient Advisory Board and the Human Factors Working Group Member and Patient Family Centered-Care Partners Advisory Board; and reports other interests/relationships as American Association of Kidney Patients Ambassador, American Kidney Fund Ambassador and Kidney Health Coach, American Society of Nephrology Diabetic Kidney Disease Collaborative Task Force, Kidney Health Initiative Patient Family Partnership Council Member, Kidney Patient Advisory Council Member, Patient Family Engagement-Learning Action Network Subject Matter Expert, National Kidney Foundation Kidney Advisory Committee, Patient-Centered Outcomes Research Institute Ambassador, Patient Family Advisors Network Advisors Diversity, Equity, and Inclusion Workgroup, Quality Insights Renal Network 5 Patient Advisory Chair, and United Network for Organ Sharing Ambassador.

Funding
None.

Acknowledgments
The content of this article reflects the personal experience and views of the author(s) and should not be considered medical advice or recommendation. The content does not reflect the views or opinions of the American Society of Nephrology (ASN) or Kidney360. Responsibility for the information and views expressed herein lies entirely with the author(s).

Author Contributions
P. Gee wrote the original draft and reviewed and edited the manuscript.