MARVIX AI

SAMPLE DIALYSIS / RENAL CARE SOAP NOTE

ESRD ON HEMODIALYSIS — ACCESS OUTFLOW STENOSIS

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1 PATIENT INFORMATION

NAME
Yolanda M. Castellanos

DATE OF SERVICE
March 24, 2026

DOB
07/02/1981 (44 yrs)

PROVIDER
Marcus Oyelaran, MD

AGE / SEX
44 / Female

CREDENTIALS
MD, Board-Certified Nephrologist

MRN / PATIENT ID
DIA-551937

VISIT TYPE
Monthly in-center dialysis visit (capitated MCP)

DIALYSIS UNIT / FACILITY
Riverbend Kidney Center — Station 7, MWF first shift

NEPHROLOGIST
Marcus Oyelaran, MD (attending of record)

PRIMARY CARE PROVIDER
Dr. Helena Vasquez, Internal Medicine

CC CHIEF COMPLAINT

"I keep cramping and bottoming out near the end of my treatments, and my arm bleeds a long time after they pull the needles." Monthly dialysis review complicated by recurrent intradialytic hypotension, high interdialytic weight gain, and suspected access outflow stenosis.

S SUBJECTIVE

3a DIALYSIS MODALITY AND SCHEDULE

In-center hemodialysis, Monday/Wednesday/Friday first shift, 4 hours per session, at Riverbend Kidney Center for the past 3 years. Dialysis initiated March 2023 following progression of lupus nephritis. Left brachiocephalic AV fistula created December 2022, in continuous use since May 2023. She is generally adherent to her schedule and values her independence, working part-time as a school administrator on non-dialysis days.

3b DIALYSIS TOLERANCE

Tolerance has deteriorated over the past 6 weeks. Reports lower-extremity and abdominal cramping in the final hour of nearly every treatment, along with lightheadedness, nausea, and on three occasions near-syncope requiring Trendelenburg positioning and saline bolus. Symptoms cluster on Monday treatments, following the long interdialytic interval. She reports profound post-dialysis fatigue lasting 4–6 hours, described as "washed out," which is interfering with her work schedule. Denies chest pain or dyspnea during treatment.

3c MISSED OR SHORTENED TREATMENTS

No fully missed treatments in the past month. However, four of the last twelve sessions were terminated 20–45 minutes early due to symptomatic hypotension and cramping, with a cumulative shortfall of roughly 2 hours of prescribed treatment time. Two additional runs required ultrafiltration goal reduction mid-treatment. No transportation barriers; she drives herself.

3d VOLUME STATUS SYMPTOMS

Interdialytic weight gains have risen to 4.2–4.8 kg over the long weekend interval and 3.0–3.4 kg midweek — substantially above her prior 2.5–3.0 kg pattern. She reports increased thirst, which she attributes to eating more takeout food since a recent change in work schedule. Mild ankle edema by Monday morning; two-pillow orthopnea on Sunday nights that resolves after treatment. This creates a difficult cycle: high gains require aggressive ultrafiltration, which in turn drives her intradialytic hypotension and cramping.

3e BLOOD PRESSURE HISTORY

Pre-dialysis blood pressures have run 155–170/85–95 mmHg, reflecting volume expansion. Intradialytic pressures drop substantially in the third and fourth hours, with nadirs of 82–90/48–55 mmHg on affected runs. Post-dialysis pressures 105–115/62–70. She takes lisinopril and carvedilol in the morning, including on dialysis days — a likely contributor to intradialytic hypotension that has not previously been addressed. Home readings on non-dialysis days average 140s/80s.

3f DIALYSIS ACCESS SYMPTOMS

Several converging concerns with the left brachiocephalic fistula. Post-needle hemostasis time has increased from a usual 8–10 minutes to 25–35 minutes over the past 6 weeks. Nursing staff report rising venous pressures (from a baseline of approximately 160 mmHg to 210–230 mmHg at a blood flow of 400 mL/min) and two episodes of difficulty achieving prescribed blood flow. She reports increased arm swelling toward the end of the week and describes the fistula as “feeling harder” and more pulsatile than before. No pain, fever, drainage, erythema, or bleeding between treatments. She denies any loss of thrill.

3g RESIDUAL KIDNEY FUNCTION / URINE OUTPUT

Essentially anuric — urine output less than 100 mL daily, unchanged over the past 18 months. No diuretics. No urinary symptoms. Residual kidney function is negligible, which means fluid removal depends entirely on ultrafiltration and makes her interdialytic gains clinically consequential.

3h DIET AND FLUID ADHERENCE

Adherence has slipped over the past 2 months coinciding with a work schedule change. Reports frequent restaurant and takeout meals with high sodium content, which drives thirst and consequent fluid intake. Fluid restriction of 1 L daily is inconsistently followed, estimated at 1.5–2 L. Potassium generally reasonable; phosphorus intake elevated with frequent processed foods and cola beverages. Appetite good. She acknowledges the connection between sodium intake and her cramping but reports difficulty with meal planning given her schedule.

3i MEDICATION ADHERENCE AND SIDE EFFECTS

Reports good adherence to sevelamer carbonate 1,600 mg three times daily with meals, though she admits skipping the midday dose on workdays roughly twice weekly. Also on cinacalcet 60 mg daily (with mild nausea), calcitriol, carvedilol, lisinopril, atorvastatin, hydroxychloroquine (maintained for lupus), and a renal multivitamin. Receives epoetin alfa and IV iron sucrose during treatments. No anticoagulation other than heparin during dialysis. Denies binder-related constipation.

3j SYMPTOMS OF UREMIA OR DIALYSIS COMPLICATIONS

Reports moderate generalized pruritus, worse at night and interfering with sleep, along with restless legs. Denies nausea between treatments, metallic taste, confusion, bleeding, or pericarditis-type chest pain. Muscle cramps as described above are treatment-associated rather than constant. Mild peripheral neuropathy in the feet, stable.

3k HOSPITALIZATIONS / INTERVAL EVENTS

No hospitalizations or emergency visits in the past month. Last admission was August 2025 for a catheter-related bloodstream infection prior to fistula maturation, treated with vancomycin and resolved. No transfusions in the past year. No access interventions to date — the fistula has never required angioplasty. No changes to the dialysis prescription in the past 4 months.

3l TRANSPLANT / MODALITY PLANNING

Actively listed at the regional transplant center since November 2024 with accrued waiting time from her dialysis start date. A living donor evaluation is in progress — her younger sister completed initial screening in January 2026, is ABO-compatible, and is scheduled for final crossmatch and donor nephrectomy evaluation in April 2026. Lupus has been serologically quiescent for over 2 years, an important factor in transplant candidacy. She has expressed interest in home hemodialysis as a bridge if the transplant timeline extends; modality education was offered and she requested materials.

3m PERTINENT NEGATIVES

Denies chest pain, severe dyspnea, syncope with complete loss of consciousness, fever, chills, access-site erythema or drainage, uncontrolled bleeding between treatments, palpitations, confusion, or symptoms of severe hyperkalemia. No recent lupus flare symptoms — no rash, oral ulcers, pleuritic pain, or new joint swelling.

ROS DIALYSIS / RENAL CARE REVIEW OF SYSTEMS

CONSTITUTIONAL / GI

Positive for post-dialysis fatigue and pruritus with sleep disturbance; appetite good; denies nausea or vomiting between treatments

CARDIOPULMONARY

Positive for Sunday-night orthopnea and intradialytic lightheadedness; denies chest pain, palpitations, or true syncope

NEUROMUSCULAR

Positive for intradialytic cramping, restless legs, and post-dialysis weakness; stable mild foot neuropathy

ACCESS

Positive for prolonged post-needle bleeding, arm swelling, and cannulation difficulty; denies access pain, drainage, or erythema

URINARY

Anuric — less than 100 mL daily, unchanged

INFECTIOUS

Denies fever, chills, or infection symptoms; no hospitalization this interval

ADHERENCE

Positive for reduced diet and fluid adherence; occasional missed midday phosphate binder dose

O OBJECTIVE

5a VITALS

TEMPERATURE

97.9 °F

WEIGHT

68.9 kg (pre-dialysis, today)

BLOOD PRESSURE

162/88 mmHg pre-dialysis; nadir 86/52 last Monday

DRY WEIGHT

64.5 kg (prescribed — appropriateness in question)

HEART RATE

82 bpm, regular

RESPIRATORY RATE

16 / min

OXYGEN SATURATION

97% on room air

PRE-DIALYSIS WEIGHT, IF APPLICABLE

68.9 kg

POST-DIALYSIS WEIGHT, IF APPLICABLE

65.1 kg (last treatment — goal not met)

INTERDIALYTIC WEIGHT GAIN

4.4 kg over the long interval (6.8% of dry weight)

5b EXAMINATION

GENERAL APPEARANCE

Well-appearing woman in no distress, seated in the dialysis chair pre-treatment; well nourished; alert, fully oriented, and engaged

CARDIOVASCULAR

Regular rate and rhythm; soft systolic flow murmur; JVP mildly elevated at approximately 8 cm pre-dialysis; 1+ bilateral ankle edema

PULMONARY

Clear to auscultation with trace bibasilar crackles pre-dialysis; no wheezing; normal work of breathing; no oxygen requirement

ABDOMEN

Soft, non-tender, non-distended; no ascites; no peritoneal dialysis catheter present

EXTREMITIES

1+ ankle edema bilaterally; pulses intact; no wounds or ulcers; left arm with visible fullness proximal to the fistula and mild non-pitting swelling of the forearm; no steal symptoms — hand warm with normal capillary refill

SKIN

Diffuse excoriations over the forearms and upper back consistent with uremic pruritus; no rash, purpura, or calciphylaxis lesions; no malar rash

NEUROLOGIC

Alert and oriented ×3; no asterixis; mild symmetric distal sensory reduction in the feet; strength 5/5 throughout

DA DIALYSIS ACCESS EXAMINATION

ACCESS TYPE

Left brachiocephalic arteriovenous fistula, native, created 12/2022 and in use since 05/2023

LOCATION AND LATERALITY

Left upper arm, non-dominant

THRILL AND BRUIT

Thrill present but altered — markedly water-hammer/pulsatile at the outflow segment; bruit high-pitched and discontinuous rather than the prior low-pitched continuous machinery quality

CANNULATION SITES

Rope-ladder technique; two well-healed site clusters; no infiltration marks; nursing reports increasing cannulation difficulty at the venous site

CATHETER EXIT-SITE APPEARANCE

Not applicable — no catheter in place

SIGNS OF STENOSIS, ANEURYSM, INFILTRATION, INFECTION, SWELLING, ERYTHEMA, DRAINAGE, TENDERNESS, OR PROLONGED BLEEDING

Multiple findings suggesting outflow stenosis: prolonged post-needle bleeding of 25–35 minutes, mild arm swelling, an increasingly pulsatile segment with loss of the normal continuous bruit, elevated venous pressures of 210–230 mmHg at 400 mL/min blood flow, and a 3 cm mildly aneurysmal segment without skin compromise. No erythema, drainage, tenderness, or infection signs. Arm elevation test abnormal — the fistula fails to collapse appropriately, supporting central or outflow obstruction.

CATHETER CUFF VISIBILITY, DRESSING STATUS, TENDERNESS, DRAINAGE, OR MALFUNCTION CONCERN

Not applicable — no catheter

PD CATHETER EXIT-SITE CONDITION, TUNNEL TENDERNESS, DRAINAGE, ERYTHEMA, OR CUFF ISSUES

Not applicable — no peritoneal dialysis catheter

NEED FOR ACCESS IMAGING, INTERVENTION, VASCULAR SURGERY REFERRAL, OR CATHETER EXCHANGE

Yes — urgent fistulogram with intent to treat by angioplasty; vascular access surgery referral placed today. No catheter exchange needed.

DP DIALYSIS PRESCRIPTION / TREATMENT DETAILS

DIALYSIS MODALITY

In-center hemodialysis, conventional

FREQUENCY AND SCHEDULE

Three times weekly — Monday, Wednesday, Friday, first shift

TREATMENT DURATION

240 minutes prescribed (frequently shortened to 195–220 minutes)

DIALYZER TYPE, IF AVAILABLE

Optiflux F180NR high-flux polysulfone

BLOOD FLOW RATE

400 mL/min prescribed; achieved flow intermittently limited to 330–360 mL/min

DIALYSATE FLOW RATE

800 mL/min

ULTRAFILTRATION GOAL

4.4 kg today — equating to a UF rate of approximately 16 mL/kg/hr, above the recommended 13 mL/kg/hr threshold

DRY WEIGHT

64.5 kg prescribed; likely set too low given recurrent intradialytic hypotension

ANTICOAGULATION USED DURING DIALYSIS

Heparin 4,000 units bolus with 1,000 units/hr maintenance

KT/V OR URR IF AVAILABLE

spKt/V 1.19 this month, down from 1.42 three months ago; URR 64%, down from 71%

RECENT ADEQUACY CONCERNS

Yes — declining Kt/V and URR, with recirculation suspected secondary to outflow stenosis compounded by shortened treatment times

DIALYSATE POTASSIUM, CALCIUM, BICARBONATE, AND SODIUM BATH

K 2.0 mEq/L, Ca 2.5 mEq/L, bicarbonate 35 mEq/L, sodium 138 mEq/L (no sodium modeling currently in use)

PD DWELL VOLUMES, EXCHANGES, DIALYSATE CONCENTRATION, CYCLER SETTINGS, DWELL TIMES, AND ULTRAFILTRATION, IF APPLICABLE

Not applicable — patient is on hemodialysis

L LABORATORY AND DIAGNOSTIC RESULTS

Kidney Function and Adequacy:

Pre-dialysis BUN 68 mg/dL, post-dialysis BUN 24 mg/dL; creatinine 9.2 mg/dL pre-dialysis. spKt/V 1.19 (below the 1.2 minimum target), URR 64% (below the 65% target). Both down from spKt/V 1.42 and URR 71% three months ago. Residual kidney function negligible — anuric.

Electrolytes / Acid-Base:

Sodium 138, potassium 5.4 mmol/L pre-dialysis (mildly elevated), chloride 99, bicarbonate 21 mmol/L, calcium 9.1 mg/dL, phosphorus 6.8 mg/dL (elevated), magnesium 2.2. Anion gap 18.

Volume / Nutrition:

Albumin 3.4 g/dL (mildly reduced but stable); normalized protein catabolic rate 1.0 g/kg/day, indicating adequate protein intake; weight trend stable at dry weight but with rising interdialytic gains. Prealbumin not routinely drawn at this facility.

Anemia Labs:

Hemoglobin 9.4 g/dL, down from 10.8 three months ago; hematocrit 28.6%. Ferritin 240 ng/mL, TSAT 17% — consistent with functional iron deficiency. Currently on epoetin alfa 8,000 units three times weekly (recently escalated from 6,000) and IV iron sucrose 100 mg monthly. Pattern suggests ESA hyporesponsiveness. No transfusions in the past 12 months.

CKD-Mineral Bone Disease Labs:

Calcium 9.1 mg/dL, phosphorus 6.8 mg/dL (persistently above target for four consecutive months), intact PTH 892 pg/mL (markedly elevated, up from 640 three months ago), 25-OH vitamin D 26 ng/mL, alkaline phosphatase 168 U/L (rising). Consistent with refractory secondary hyperparathyroidism.

Infection / Access Labs:

CBC with white count 6.8 K/µL, no left shift. No fever or clinical infection; blood cultures not indicated and not drawn. CRP mildly elevated at 8 mg/L, likely reflecting chronic inflammation and contributing to ESA hyporesponsiveness. No catheter or peritoneal fluid cultures applicable.

Imaging / Access Studies:

No prior fistulogram — first one now ordered urgently. Access ultrasound with Doppler performed 03/20/2026 showed a focal stenosis of approximately 65–70% in the cephalic arch outflow with elevated peak systolic velocity ratio, upstream dilation to 3 cm, and reduced access flow measured at 480 mL/min (down from 1,150 mL/min at surveillance one year ago). Chest X-ray clear. Echocardiogram 11/2025: LVEF 58%, moderate LVH, grade 1 diastolic dysfunction, no significant valvular disease.

Prior Records Reviewed:

Dialysis run sheets for the past 12 treatments including intradialytic blood pressure records and UF profiles, monthly unit nursing notes, access surveillance flow data trended over 24 months, the November 2025 echocardiogram, the August 2025 hospitalization record for catheter-related bacteremia, transplant center correspondence and listing documentation, rheumatology notes confirming quiescent lupus, and the complete current medication list.

A ASSESSMENT

ESRD secondary to lupus nephritis (ISN/RPS class IV), on in-center hemodialysis for 3 years via a left brachiocephalic AV fistula. Lupus has remained serologically and clinically quiescent for over 2 years, which is

favorable for the active transplant pathway.

Dialysis access outflow stenosis — the central problem driving this visit. Multiple independent findings converge: prolonged post-needle hemostasis of 25–35 minutes, a water-hammer pulse with loss of the continuous bruit, an abnormal arm elevation test, mild arm swelling, venous pressures rising to 210–230 mmHg, cannulation difficulty, and — most objectively — a fall in measured access flow from 1,150 to 480 mL/min with a 65–70% cephalic arch stenosis on Doppler. This constitutes a clinically significant, intervention-warranting stenosis at meaningful risk of thrombosis and access loss. Preserving this fistula is a priority given her transplant timeline and prior catheter-related bacteremia.

Declining dialysis adequacy — spKt/V has fallen from 1.42 to 1.19 and URR from 71% to 64%, both now below minimum targets. This is multifactorial and directly downstream of the access problem: recirculation and limited achievable blood flow from the stenosis, compounded by the cumulative loss of approximately 2 hours of prescribed treatment time to early terminations.

Recurrent intradialytic hypotension with cramping — a self-reinforcing cycle. Three contributors act together: (1) excessive interdialytic weight gain of 4.2–4.8 kg from high dietary sodium and consequent thirst, forcing a UF rate of roughly 16 mL/kg/hr, above the 13 mL/kg/hr threshold associated with harm; (2) a prescribed dry weight of 64.5 kg that is likely set too low, given she is symptomatic before reaching goal yet still shows mild volume signs pre-dialysis; and (3) antihypertensive dosing — lisinopril and carvedilol taken on the morning of treatment. The early terminations that result then worsen both volume control and adequacy, feeding back into the cycle.

Refractory secondary hyperparathyroidism with PTH rising to 892 pg/mL despite cinacalcet and calcitriol, alongside persistent hyperphosphatemia of 6.8 mg/dL over four months. Binder adherence gaps (missed midday doses) and high dietary phosphorus from processed foods and cola are contributing. Rising alkaline phosphatase suggests active high-turnover bone disease.

ESA hyporesponsiveness with functional iron deficiency — hemoglobin has fallen to 9.4 despite ESA escalation, with TSAT 17% and ferritin 240. Underdialysis and chronic inflammation (CRP 8) are both plausible contributors, and the access-driven adequacy decline may itself be a driver — addressing the stenosis may improve ESA response.

Uremic pruritus with sleep disruption, likely multifactorial from hyperphosphatemia, elevated PTH, and underdialysis. **Nutritional status adequate** with albumin 3.4 and nPCR 1.0. **Transplant candidacy active and favorable** — listed, quiescent lupus, and a compatible living donor progressing toward April evaluation, which makes fistula preservation and adequacy optimization especially important now.

P PLAN

Dialysis access plan (priority):

Urgent fistulogram with intent to treat by balloon angioplasty, scheduled within 5 days — interventional nephrology contacted directly today. Vascular access surgery referral placed concurrently in case angioplasty is inadequate or the aneurysmal segment requires attention. Hold heparin appropriately per procedure protocol. Continue rope-ladder cannulation and avoid the aneurysmal segment. Nursing to log venous pressures and hemostasis times every treatment. Repeat access flow surveillance 4 weeks post-intervention. Reinforce that this fistula must be preserved — no blood draws, IVs, or blood pressure cuffs on the left arm.

Dialysis prescription plan:

Extend treatment time from 240 to 255 minutes on Monday and Wednesday to recover lost clearance and reduce the required UF rate per hour. Re-measure spKt/V two weeks after angioplasty, when recirculation should resolve; target spKt/V above 1.4. If adequacy remains suboptimal after access correction, consider a fourth weekly treatment or a larger dialyzer.

Volume management:

Increase prescribed dry weight from 64.5 kg to 65.5 kg as a therapeutic trial, given symptomatic hypotension before reaching goal — reassess clinically in 2 weeks with attention to edema, JVP, and pre-dialysis blood pressure. Apply sodium modeling (start 145 mEq/L, taper to 137) and cool dialysate at 35.5 °C to improve hemodynamic tolerance. Set a realistic UF ceiling of 13 mL/kg/hr; if the goal cannot be met within that ceiling, extend time rather than raise the rate.

Blood pressure management:

Move lisinopril and carvedilol to evening dosing on dialysis days — a simple change likely to meaningfully reduce intradialytic hypotension. Continue current doses otherwise. Monitor pre-, intra-, and post-dialysis pressures closely over the next 6 treatments. If interdialytic hypertension persists after volume optimization, adjust the regimen rather than accept high UF as the control mechanism.

Electrolyte and acid-base management:

Potassium 5.4 pre-dialysis — continue the 2.0 mEq/L bath and reinforce dietary potassium counseling; avoid lowering the bath further given cramping and arrhythmia risk. Bicarbonate 21 with a widened anion gap — improved clearance after access correction should help; continue the 35 mEq/L bicarbonate bath and recheck.

CKD-mineral bone disease management:

Refractory secondary hyperparathyroidism with PTH 892 and phosphorus 6.8. Switch cinacalcet to etelcalcetide 5 mg IV three times weekly at the end of each dialysis session — this removes the adherence and nausea barriers by making dosing observed and eliminating the oral route. Increase sevelamer to 2,400 mg three times daily with meals and provide a pill organizer plus a workday reminder strategy for the midday dose. Continue calcitriol. Recheck calcium, phosphorus, and PTH in 4 weeks. If PTH remains above 800 after 3 months of optimized therapy, refer for parathyroidectomy evaluation — discussed with the patient today.

Anemia management:

ESA hyporesponsiveness with functional iron deficiency. Increase IV iron sucrose to 100 mg weekly for 5 doses, then reassess iron studies, targeting TSAT above 20% and ferritin 200–500. Hold further ESA escalation until iron is repleted and adequacy is corrected, as both are likely drivers. Recheck hemoglobin and iron studies in 4 weeks. Avoid transfusion where possible to prevent HLA sensitization ahead of transplant — an important consideration given her active living-donor pathway.

Nutrition plan:

Urgent renal dietitian referral for a focused session on restaurant and takeout sodium, which is the root driver of her thirst, weight gains, and consequent cramping. Target fluid intake at 1 L daily, sodium under 2 g, and phosphorus counseling emphasizing phosphate additives in processed foods and cola. Maintain protein at 1.2 g/kg/day given dialysis losses — nPCR 1.0 indicates room to improve. Provide practical meal-planning strategies compatible with her work schedule rather than generic restriction advice.

Infection management:

No active infection. No cultures indicated. Reinforced access hygiene and infection-prevention education, particularly relevant given her prior catheter-related bacteremia. Instructed to report fever, access erythema, drainage, or tenderness immediately.

Medication review:

Full reconciliation completed. Timing changes as above for antihypertensives. Cinacalcet discontinued in favor of etelcalcetide. Sevelamer increased. Hydroxychloroquine continued at the renally appropriate dose in coordination with rheumatology. All medications reviewed for dialysis dosing and dialyzability. Avoid nephrotoxins is not applicable, but avoid gadolinium and NSAIDs remains reinforced. Coordinated with primary care and rheumatology by direct message.

Transplant or modality planning:

Continue active listing. Notify the transplant center of the planned access intervention, which should not delay the April donor evaluation. Strongly reinforced transfusion avoidance to prevent sensitization. Provided requested home hemodialysis education materials as a possible bridge, with a formal modality education session scheduled for next month. Confirmed that quiescent lupus supports candidacy; rheumatology to provide an updated letter.

Patient education:

Spent substantial time explaining the mechanistic link between sodium intake, thirst, weight gain, aggressive ultrafiltration, and her cramping and hypotension — she had not previously connected these and was highly engaged once the cycle was drawn out for her. Reviewed access warning signs (loss of thrill, prolonged bleeding, swelling, redness, fever) with instructions to call immediately. Explained the fistulogram procedure and expectations. Reinforced the importance of completing full treatments, and reframed early termination as something we will prevent by fixing the underlying causes rather than something she must simply endure.

F FOLLOW-UP

Fistulogram with angioplasty within 5 days; nephrology to review the result immediately. Clinical reassessment at the dialysis unit within 2 weeks to evaluate the dry weight trial, the effect of evening antihypertensive dosing, and intradialytic tolerance, with review of every run sheet in the interval. Repeat spKt/V 2 weeks post-angioplasty. Labs in 4 weeks for calcium, phosphorus, PTH, hemoglobin, and iron studies. Access flow surveillance 4 weeks post-intervention. Renal dietitian within 1 week. Next monthly capitated visit April 2026, at which point transplant donor evaluation progress will be reviewed. Parathyroidectomy evaluation if PTH remains above 800 at 3 months.

TD TIME DOCUMENTATION, IF APPLICABLE

TOTAL TIME SPENT	55 minutes
COUNSELING / COORDINATION OF CARE TIME	25 minutes
DIALYSIS UNIT REVIEW TIME, IF APPLICABLE	20 minutes (run sheets, intradialytic BP records, access surveillance trends)
RECORDS REVIEW TIME, IF APPLICABLE	15 minutes (Doppler, echocardiogram, transplant center correspondence)

TB BILLING CONSIDERATIONS

E/M LEVEL, IF APPLICABLE

Included in monthly capitated payment — not separately billed

DIALYSIS MANAGEMENT CODE(S), IF APPLICABLE

90960 — ESRD monthly capitated payment, age 20+, four or more face-to-face visits per month

PROCEDURE CODE(S), IF APPLICABLE

None performed this visit; fistulogram/angioplasty to be billed separately by interventional nephrology

BASIS FOR BILLING

Monthly dialysis management (MCP)

PRIMARY ESRD / CKD / DIALYSIS DIAGNOSIS CODE + DESCRIPTION

N18.6 — End stage renal disease (with Z99.2, dependence on renal dialysis)

SECONDARY DIAGNOSIS CODE(S)

M32.14 (SLE glomerular disease); T82.858A (stenosis of vascular dialysis access, initial encounter); N25.81 (secondary hyperparathyroidism of renal origin); E83.39 (hyperphosphatemia); D63.1 (anemia in CKD); L29.8 (uremic pruritus); E87.5 (hyperkalemia)

SO SIGNATURE

PROVIDER NAME	CREDENTIALS	SPECIALTY	DATE	TIME
Marcus Oyelaran, MD	MD, FASN	Nephrology / Dialysis Care	03/24/2026	09:50