MARVIX AI

SAMPLE INTERVENTIONAL NEPHROLOGY SOAP NOTE

AV GRAFT THROMBOSIS — THROMBECTOMY AND PTA

Questions? Visit us at www.marvix.ai

1 PATIENT INFORMATION

NAME
Bernadette L. Kowalczyk

DATE OF SERVICE
June 11, 2026

DOB
04/25/1959 (67 yrs)

PROVIDER
Simon Nakamura, MD

AGE / SEX
67 / Female

CREDENTIALS
MD, Interventional Nephrology

MRN / PATIENT ID
IVN-926714

VISIT TYPE
Interventional Nephrology Consultation — urgent, same-day procedure

DIALYSIS UNIT / FACILITY
Prairie View Dialysis Center — TThS second shift

PRIMARY NEPHROLOGIST
Dr. Amara Boateng

REFERRING PROVIDER
Prairie View charge nurse, urgent referral for loss of thrill

CC CHIEF COMPLAINT

"The nurse couldn't feel the buzz in my arm this morning, so they sent me straight here." Urgent referral for acute loss of thrill in a left forearm AV graft, with dialysis unable to proceed.

S SUBJECTIVE

3a REASON FOR INTERVENTIONAL NEPHROLOGY EVALUATION

Acute thrombosis of a left forearm arteriovenous graft. She presented to her scheduled Thursday morning treatment; staff were unable to palpate a thrill or auscultate a bruit and could not cannulate. Treatment was cancelled and she was referred emergently. Her last dialysis was Tuesday, so she is now approaching 48 hours without treatment — this is both an access emergency and a developing dialysis emergency.

3b DIALYSIS ACCESS HISTORY

Extensive and progressively compromised access history. A left radiocephalic fistula was created in 2019 but failed to mature and was abandoned after unsuccessful balloon-assisted maturation. The current left forearm loop AV graft (PTFE) was placed in March 2021 and has been her sole functional access for 5 years. She has required two prior interventions: angioplasty of the venous anastomosis in August 2024, and a second angioplasty at the same site in April 2025 — note the shortening interval between interventions, from 8 months to 14 months to now roughly 14 months, with progressively less durable results. A right internal jugular tunneled catheter was used for 4 months in 2021 during graft maturation and was removed without complication. Right-arm access options are limited by a prior right subclavian catheter placement in 2020 during a hospitalization, raising concern for central venous stenosis on that side.

3c DIALYSIS TREATMENT CONCERNS

Over the preceding 3 weeks, unit staff documented a clear deterioration: venous pressures rising from a baseline of approximately 170 mmHg to 240–260 mmHg at 400 mL/min, achieved blood flow falling to 300–330 mL/min, two episodes of clot aspiration at the start of treatment, and increasingly difficult cannulation with two infiltration events in the past 2 weeks. Post-needle hemostasis had lengthened to 20–25 minutes. Kt/V fell from 1.38 to 1.16 over the same interval. These were logged on run sheets but no referral had been generated — a missed opportunity for elective intervention before thrombosis.

3d ACCESS SITE SYMPTOMS

Reports the graft has felt “quiet and hard” since yesterday evening. Mild aching over the graft, rated 3/10, without severe pain. No redness, warmth, drainage, or fever. No skin thinning or ulceration over the graft. Denies hand pain, numbness, tingling, coolness, weakness, or color change — no symptoms of steal. Mild left forearm fullness, unchanged from her baseline.

3e CATHETER-RELATED SYMPTOMS, IF APPLICABLE

Not applicable currently — no catheter in place. She is strongly averse to catheter placement, recalling the 2021 experience and expressing anxiety about infection risk; this preference was explicitly discussed in planning.

3f PERITONEAL DIALYSIS ACCESS SYMPTOMS, IF APPLICABLE

Not applicable — no peritoneal dialysis catheter and no history of peritoneal dialysis. Peritoneal dialysis was previously considered but declined due to prior abdominal surgery and adhesions.

3g BLEEDING / ANTICOAGULATION HISTORY

On aspirin 81 mg daily for coronary artery disease. Not on systemic anticoagulation. No history of bleeding diathesis, easy bruising, or coagulopathy. Prolonged post-needle bleeding as described above is attributable to outflow obstruction rather than a coagulation defect. No recent medication changes. No known hypercoagulable disorder, though the recurrent access thrombosis pattern raises the question.

3h INFECTION SYMPTOMS

Denies fever, chills, malaise, access erythema, tenderness beyond the mild ache, drainage, or purulence. No recent antibiotics. No prior access infection. No hospitalization for infection in the past year.

3i RELEVANT MEDICAL HISTORY

ESRD secondary to diabetic nephropathy, on hemodialysis since 2021. Type 2 diabetes for 24 years with retinopathy, neuropathy, and documented peripheral arterial disease. Coronary artery disease status post drug-eluting stent to the LAD in 2018. Hypertension. Heart failure with preserved ejection fraction. Hyperlipidemia. Prior right subclavian catheter (2020) with attendant central stenosis risk. Prior abdominal surgery — hysterectomy and later small bowel obstruction with lysis of adhesions. Former smoker, 30 pack-years, quit 2015. No transplant history; she was declined for listing in 2023 due to cardiac risk, with reassessment deferred.

3j PRIOR EVALUATION AND TREATMENT

Access ultrasound in March 2026 (routine surveillance) showed graft flow of 620 mL/min, down from 980 mL/min a year prior — a decline that met criteria for referral but was not acted upon. Two prior fistulograms with angioplasty (08/2024 and 04/2025), both showing venous anastomotic stenosis treated with high-pressure balloon, no stent placed. No prior thrombectomy. No prior central venogram. Vascular surgery evaluated her in 2021 at graft placement; no evaluation since.

3k PERTINENT NEGATIVES

Denies fever, severe access pain, rapidly worsening swelling, uncontrolled bleeding, hand ischemia symptoms (no pain, pallor, paresthesia, or coolness), chest pain, severe dyspnea, or syncope. No sepsis features — afebrile and hemodynamically stable. Importantly, she has no hyperkalemic symptoms and no significant volume overload despite the missed treatment.

ROS INTERVENTIONAL NEPHROLOGY REVIEW OF SYSTEMS

ACCESS SITE
Positive for mild aching and a “hard, quiet” graft; denies redness, warmth, drainage, or bleeding

THRILL / BRUIT
Positive — complete loss of both thrill and bruit since yesterday evening

DIALYSIS PERFORMANCE
Positive for high venous pressures, poor flow, clot aspiration, difficult cannulation, and falling Kt/V over 3 weeks

POST-DIALYSIS BLEEDING
Positive — hemostasis time lengthened to 20–25 minutes before thrombosis

LIMB / NEUROVASCULAR
Mild baseline forearm fullness; denies hand pain, numbness, coolness, weakness, or color change

INFECTIOUS
Denies fever, chills, malaise, or infection symptoms

CATHETER
Not applicable — no catheter in place

PERITONEAL DIALYSIS
Not applicable — no PD catheter

CARDIOPULMONARY / VOLUME
Denies chest pain, dyspnea, dizziness, or syncope; no significant volume overload despite missed treatment

O OBJECTIVE

5a VITALS

TEMPERATURE
98.0 °F

WEIGHT
71.2 kg (dry weight 69.5 kg)

BLOOD PRESSURE
158/82 mmHg

PAIN SCORE
3/10, left forearm ache

HEART RATE
84 bpm, regular

OXYGEN SATURATION
96% on room air

RESPIRATORY RATE

16 / min

5b EXAMINATION

GENERAL APPEARANCE

Alert, cooperative, mildly anxious about the procedure but in no acute distress; euvolemic to minimally volume-expanded; able to lie flat and tolerate the procedure

CARDIOVASCULAR

Regular rate and rhythm; grade 2/6 systolic murmur (known); no JVD; trace bilateral ankle edema; diminished pedal pulses bilaterally consistent with known PAD

PULMONARY

Clear bilaterally with no crackles or wheezes; no increased work of breathing; no oxygen requirement

EXTREMITIES / VASCULAR

Left forearm with a palpable, firm, non-pulsatile graft cord and no thrill. Radial and ulnar pulses 2+ at the left wrist. Hand warm and pink with capillary refill under 2 seconds. Sensation and grip strength intact and symmetric — no ischemia. Mild non-pitting forearm fullness without new swelling. No prominent collateral veins over the chest or shoulder to suggest central obstruction.

SKIN

Intact over the graft with no erythema, warmth, drainage, ulceration, or skin thinning. Two healed cannulation-site clusters with scattered old bruising. No aneurysmal skin changes. No infiltration hematoma.

DA DIALYSIS ACCESS EXAMINATION

ACCESS TYPE

Left forearm loop arteriovenous graft, PTFE, placed 03/2021

ACCESS LOCATION AND LATERALITY

Left forearm, non-dominant, loop configuration

THRILL AND BRUIT PRESENCE, INTENSITY, AND LOCATION

Absent — no thrill palpable and no bruit audible at any point along the graft, arterial anastomosis, or venous anastomosis

PULSATILITY OR HYPERPULSATILITY

Non-pulsatile; graft is firm and cord-like, consistent with acute thrombosis

COLLAPSIBILITY WITH ARM ELEVATION

Does not collapse with elevation — consistent with a thrombosed, non-flowing segment

ANEURYSM OR PSEUDOANEURYSM FEATURES

None — no aneurysmal dilation or pseudoaneurysm identified

CANNULATION SITES AND NEEDLE TRACK CONDITION

Two healed rope-ladder site clusters; tracks intact; no active infiltration or open sites

PROLONGED BLEEDING SITES

None active today; historically prolonged at the venous needle site prior to thrombosis

INFILTRATION, HEMATOMA, BRUISING, OR SWELLING

Scattered resolving ecchymosis from two infiltration events in the past 2 weeks; no acute hematoma

SIGNS OF STENOSIS, THROMBOSIS, INFECTION, ULCERATION, EROSION, OR SKIN COMPROMISE

Acute thrombosis confirmed clinically — firm cord, absent thrill and bruit, non-collapsible. Prior venous anastomotic stenosis twice treated. No infection, ulceration, erosion, or skin compromise.

DISTAL PULSES, HAND WARMTH, SENSATION, STRENGTH, AND CAPILLARY REFILL

Radial and ulnar pulses 2+; hand warm and well perfused; sensation intact; grip 5/5; capillary refill under 2 seconds — no distal ischemia

CATHETER EXIT SITE, TUNNEL TENDERNESS, CUFF STATUS, DRESSING STATUS, DRAINAGE, OR ERYTHEMA

Not applicable — no catheter in place

PD CATHETER EXIT SITE, TUNNEL, DRAINAGE, LEAKS, CUFF STATUS, AND ABDOMINAL FINDINGS

Not applicable — no peritoneal dialysis catheter

AD DIALYSIS ACCESS / TREATMENT DATA

RECENT BLOOD FLOW RATES

Fell from 400 mL/min prescribed to 300–330 achieved over 3 weeks; zero today — unable to cannulate

CANNULATION DIFFICULTY PATTERN

Progressively difficult over 3 weeks with two infiltration events

ARTERIAL PRESSURE TRENDS

Increasingly negative, reaching −250 mmHg at reduced flow

PROLONGED POST-DIALYSIS BLEEDING DURATION

Lengthened from a baseline 10 minutes to 20–25 minutes

VENOUS PRESSURE TRENDS

Rose from a baseline of ~170 mmHg to 240–260 mmHg at 400 mL/min

CATHETER LINE REVERSAL REQUIREMENT

Not applicable — no catheter

ACCESS RECIRCULATION RESULTS

Recirculation 18% measured 03/2026 (abnormal, above the 10% threshold)

TPA OR LOCK THERAPY USE

None to date

KT/V OR URR TRENDS

spKt/V fell from 1.38 to 1.16; URR from 70% to 63% over 3 weeks

RECENT ACCESS SURVEILLANCE MEASUREMENTS

Ultrasound 03/2026: graft flow 620 mL/min, down from 980 mL/min in 03/2025 — met referral criteria

DELIVERED DIALYSIS TIME

Full 240 minutes delivered, though with reduced clearance; today's treatment cancelled entirely

DIALYSIS STAFF CONCERNS OR RUN SHEET FINDINGS

Staff documented rising venous pressures, clot aspiration on two occasions, and cannulation difficulty; concerns logged on run sheets but no interventional referral was generated until today

RECENT INFILTRATION EVENTS

Two in the past 2 weeks, both at the venous needle site

PR PROCEDURES PERFORMED

Procedure name and indication:

Left forearm AV graft declot — percutaneous mechanical and pharmacomechanical thrombectomy with fistulogram and balloon angioplasty of the venous anastomosis. Indication: acute thrombosis of the sole functional dialysis access in a patient approaching 48 hours without dialysis, with the goal of restoring same-day access and avoiding tunneled catheter placement.

Access site, laterality, consent, anesthesia/sedation:

Left forearm graft, accessed percutaneously via crossed-catheter technique with two 6 French sheaths placed under ultrasound guidance — one directed toward the venous outflow and one toward the arterial anastomosis. Written informed consent obtained after discussion of bleeding, infection, vessel injury, pulmonary embolism, contrast reaction, arterial embolization, and the possibility of failure requiring catheter placement; the patient verbalized understanding and consented. Local anesthesia with 1% lidocaine plus moderate conscious sedation using midazolam 1 mg and fentanyl 50 mcg IV, with continuous cardiac, pulse oximetry, and blood pressure monitoring throughout.

Technique and findings:

Initial fistulogram after sheath placement demonstrated complete thrombosis of the graft body with an organized arterial plug at the arterial anastomosis. Following thrombus clearance, a high-grade stenosis of approximately 85% was identified at the venous anastomosis — the same lesion treated in 08/2024 and 04/2025, now more severe and clearly the underlying cause of the thrombosis. Central venogram of the left subclavian and brachiocephalic veins was performed to exclude central stenosis given her prior right subclavian catheter, and demonstrated widely patent central veins with no stenosis and no collateral formation.

Intervention performed, devices used, contrast use, fluoroscopy/ultrasound use:

Pharmacomechanical thrombectomy performed using 4 mg tissue plasminogen activator instilled into the graft with a 20-minute dwell, followed by mechanical maceration and aspiration thrombectomy. The arterial plug was retrieved with a 5.5 mm Fogarty balloon using careful sequential pull-back technique. The venous anastomotic stenosis was then treated with a 7 mm × 4 cm high-pressure balloon inflated to 20 atm for 60 seconds, repeated twice, with resolution of the waist and less than 10% residual stenosis on completion angiography. Given this is the third recurrence at the same site within 22 months, a 7 mm × 5 cm stent-graft was deployed across the venous anastomosis to improve durability. Ultrasound guidance for access; fluoroscopy time 18.4 minutes; 65 mL iodinated contrast used (minimized given residual renal function is negligible — patient is anuric, so contrast nephrotoxicity is not a concern).

Hemostasis, estimated blood loss, patient tolerance, complications if any:

Completion angiogram showed brisk flow through the graft with a restored palpable thrill and audible bruit. Sheaths removed and hemostasis achieved with purse-string sutures at both sites; hemostasis complete within 6 minutes. Estimated blood loss under 20 mL. The patient tolerated the procedure well with stable vital signs throughout and no sedation-related events. No complications — specifically no evidence of arterial embolization, symptomatic pulmonary embolism, vessel rupture, contrast reaction, or hematoma. Post-procedure the hand remained warm and well perfused with intact pulses and sensation.

L LABORATORY AND DIAGNOSTIC RESULTS

Access Imaging:

Fistulogram and central venogram performed today as detailed above — complete graft thrombosis with an 85% venous anastomotic stenosis, patent central veins. Prior access ultrasound 03/2026 showed graft flow 620 mL/min (down from 980 mL/min in 03/2025). Prior fistulograms 08/2024 and 04/2025 both documented venous anastomotic stenosis treated with angioplasty alone.

Dialysis Adequacy / Access Data:

spKt/V 1.16 (down from 1.38), URR 63% (down from 70%), recirculation 18%, and access flow 620 mL/min — all meeting or exceeding thresholds that should have prompted elective referral. Full run sheet review for the past 3 weeks documented the venous pressure and cannulation trends noted above.

Laboratory Studies:

Pre-procedure labs drawn on arrival: hemoglobin 10.9 g/dL, platelets 212 K/µL, WBC 7.1 K/µL. INR 1.1, PTT 32 seconds — no coagulopathy. Potassium 5.6 mmol/L (elevated in the setting of the missed treatment, without ECG changes), bicarbonate 20, sodium 138, calcium 8.9, phosphorus 5.8, albumin 3.5. Glucose 184 mg/dL.

Infection Data:

No cultures drawn — afebrile with no clinical signs of access or systemic infection. No recent antibiotics. No prior access infection history. Infectious disease input not required.

Prior Records Reviewed:

Prairie View dialysis unit run sheets for the past 6 weeks with venous pressure and cannulation logs, complete access history from 2019 forward, both prior fistulogram reports and angioplasty details, the 2021 graft placement operative report, vascular surgery evaluation from 2021, access surveillance ultrasound trend data over 24 months, hospitalization record from 2020 documenting the right subclavian catheter, current medication list including aspirin, and 2023 transplant evaluation correspondence.

A ASSESSMENT

Acute thrombosis of a left forearm PTFE arteriovenous graft — successfully declotted with restoration of flow. The patient presented with complete loss of thrill and bruit in her sole functional access, having missed one treatment and approaching 48 hours since her last dialysis. Same-day pharmacomechanical thrombectomy restored patency, avoiding tunneled catheter placement — a meaningful outcome given her strong catheter aversion, her limited remaining access options, and the infection and central-stenosis risks a catheter would carry.

Underlying cause: recurrent high-grade venous anastomotic stenosis — the third occurrence at the identical site in 22 months. This is the critical finding. The thrombosis was not a random event but the endpoint of a progressive, well-documented outflow lesion. The intervention interval has been shortening and each angioplasty has proven less durable, which is why a stent-graft was deployed today rather than repeating plain balloon angioplasty for a third time. Neointimal hyperplasia at the venous anastomosis is the classic failure mode of PTFE grafts, and this trajectory predicts continued surveillance needs.

Missed opportunity for elective intervention — a systems issue worth naming. Multiple objective referral criteria were met and documented before the thrombosis: access flow falling from 980 to 620 mL/min, recirculation of 18%, venous pressures rising to 240–260 mmHg, Kt/V declining from 1.38 to 1.16, clot aspiration on two occasions, and progressive cannulation difficulty. Each was recorded on run sheets, but no referral was generated. Elective intervention at any of those points would likely have prevented the thrombosis, the missed treatment, and an urgent procedure. This warrants direct feedback to the unit and a review of their surveillance escalation pathway.

Dialysis adequacy compromised with Kt/V 1.16 and URR 63%, both below minimum targets, driven by recirculation and reduced achievable flow — both expected to improve now that outflow is restored. **Hyperkalemia at 5.6** without ECG changes, attributable to the missed treatment and requiring dialysis today rather than any specific additional therapy. **No steal syndrome, no venous hypertension, and no central venous stenosis** — the central venogram was reassuring and importantly preserves future options. **No access**

infection.

Long-term access strategy is the larger concern. She has now exhausted one failed fistula and has a graft requiring escalating intervention, with right-arm options constrained by a prior right subclavian catheter. Vascular surgery should reassess her remaining anatomy proactively rather than at the next crisis, and her transplant candidacy — declined in 2023 on cardiac grounds — merits reassessment, as successful transplantation would resolve the access problem entirely.

P PLAN

Diagnostic plan:

Fistulogram, central venogram, and access flow assessment completed today — no further imaging required acutely. Establish a formal quarterly access surveillance protocol with documented flow measurements and defined escalation thresholds, communicated in writing to the dialysis unit. Repeat access ultrasound with flow measurement in 4 weeks to establish a new post-stent baseline.

Access intervention plan:

Thrombectomy with angioplasty and stent-graft placement across the venous anastomosis completed today with an excellent angiographic result. Given the third recurrence at this site, if stenosis recurs despite the stent-graft, surgical revision with a jump graft to a more proximal outflow vein should be considered rather than a fourth endovascular attempt — vascular surgery referral placed today to establish that relationship proactively.

Dialysis access use plan:

The graft may be cannulated immediately — patient sent directly back to the dialysis unit today for her missed treatment. Cannulate away from the sheath insertion sites for the first two treatments. Resume standard rope-ladder technique thereafter. No rest period required. Written instructions provided to the unit specifying cannulation zones and the post-stent surveillance plan.

Catheter management plan:

No catheter placed — successfully avoided, consistent with the patient's clearly expressed preference and with best practice for access preservation. Should a future thrombosis prove non-salvageable, a tunneled right internal jugular catheter would be the bridge of choice; left-side and subclavian placement should be avoided to preserve central veins.

Infection management:

No infection present and no cultures or antibiotics indicated. No periprocedural antibiotic prophylaxis given, consistent with guidance for percutaneous access intervention. Reinforced access hygiene and instructed the patient to report fever, redness, warmth, drainage, or new tenderness immediately.

Bleeding and anticoagulation plan:

Continue aspirin 81 mg daily — held for nothing and resumed uninterrupted. No systemic anticoagulation initiated; there is no evidence of a hypercoagulable state and routine anticoagulation after graft declot has not been shown to improve patency while increasing bleeding risk. Purse-string sutures to be removed at the next treatment. Instructed on firm site pressure and to report any bleeding not controlled within 20 minutes. Given three thrombotic-trajectory events, consider hypercoagulable evaluation if another unexplained thrombosis occurs without a demonstrable anatomic lesion.

Steal syndrome or venous hypertension plan:

Neither present. Hand remained warm and well perfused with intact pulses, sensation, and strength before and after the procedure. Central venogram excluded central stenosis and showed no collateral formation. Instructed the patient to report hand pain, coolness, numbness, or weakness — particularly relevant now that flow has been restored and augmented by the stent-graft.

Coordination:

Direct verbal handoff to the Prairie View charge nurse with the patient returning for immediate dialysis today. Written procedure summary and cannulation instructions faxed to the unit. Primary nephrologist Dr. Boateng notified by direct message. Vascular surgery referral placed for proactive long-term access planning. Recommended to Dr. Boateng that transplant re-evaluation be pursued given her 2023 cardiac-based decline is now three years old. Formal feedback provided to the unit regarding the surveillance escalation gap.

Patient education:

Explained in plain terms that the graft had clotted, why it clotted — a narrowing at the same spot treated twice before — and what the stent is intended to do differently this time. Taught her to check her own thrill twice daily and demonstrated the technique at the bedside; she returned the demonstration correctly. Reviewed warning signs requiring immediate contact: loss of the buzz, new pain, swelling, redness, fever, bleeding beyond 20 minutes, or a cold or numb hand. Discussed that her access will need ongoing monitoring and that reporting changes early can prevent another emergency. She expressed relief at having avoided a catheter.

F FOLLOW-UP

Return to the dialysis unit immediately today for the missed treatment, with the graft cleared for cannulation. Interventional nephrology telephone check with the unit after the first two post-procedure treatments to confirm venous pressures, achieved blood flow, and cannulation ease. Clinic follow-up in 4 weeks with repeat access ultrasound and flow measurement to establish a post-stent baseline. Quarterly surveillance thereafter with defined escalation thresholds. Vascular surgery consultation within 6 weeks for long-term access planning. Repeat Kt/V at the next monthly draw to confirm adequacy recovery. Return immediately for loss of thrill, new pain, swelling, fever, or hand ischemia symptoms.

TD TIME DOCUMENTATION, IF APPLICABLE

TOTAL TIME SPENT

135 minutes

DIALYSIS UNIT COORDINATION TIME, IF APPLICABLE

20 minutes (urgent intake, handoff, and written cannulation instructions)

PROCEDURE TIME, IF APPLICABLE

82 minutes (sheath placement to hemostasis; fluoroscopy 18.4 minutes)

RECORDS REVIEW TIME, IF APPLICABLE

18 minutes (run sheets, prior fistulograms, access history)

COUNSELING / COORDINATION OF CARE TIME

25 minutes

TB BILLING CONSIDERATIONS

E/M LEVEL, IF SEPARATELY BILLABLE

99204 with modifier 25 — separately identifiable urgent consultation preceding the decision for same-day intervention

PROCEDURE CODE(S), IF APPLICABLE

36904 — Percutaneous thrombectomy/infusion for dialysis circuit occlusion, including diagnostic angiography

IMAGING GUIDANCE CODE(S), IF APPLICABLE

Ultrasound and fluoroscopic guidance bundled into 36904 per NCCI; 36011 central venogram documented

DIALYSIS ACCESS INTERVENTION CODE(S), IF APPLICABLE

36906 — Thrombectomy with transluminal stent placement, peripheral dialysis segment (inclusive of angioplasty)

BASIS FOR BILLING

Procedure-based, with a separately identifiable E/M service

PRIMARY DIALYSIS ACCESS / INTERVENTIONAL NEPHROLOGY DIAGNOSIS CODE + DESCRIPTION

T82.868A — Thrombosis of vascular dialysis device/graft, initial encounter

SECONDARY DIAGNOSIS CODE(S)

T82.858A (stenosis of vascular dialysis access); N18.6 (ESRD); Z99.2 (dependence on renal dialysis); E11.22 (T2DM with diabetic CKD); E87.5 (hyperkalemia); I25.10 (coronary artery disease)

SO SIGNATURE

PROVIDER NAME	CREDENTIALS	SPECIALTY	DATE	TIME
Simon Nakamura, MD	MD, FASDIN	Interventional Nephrology	06/11/2026	12:40