



Cardio Policy: Hemodialysis Access Creation

POLICY NUMBER UM CARDIO_1165	SUBJECT Hemodialysis Access Creation		DEPT/PROGRAM UM Dept	PAGE 1 OF 3
DATES COMMITTEE REVIEWED 09/09/11, 01/09/13, 08/22/13, 06/30/14, 08/12/15, 05/24/16, 11/28/16, 12/21/16, 10/10/17, 05/01/18, 09/02/18, 03/13/19, 12/11/19, 05/13/20, 02/10/21, 08/11/21, 09/08/21, 01/12/22, 02/09/22, 01/11/23	APPROVAL DATE January 11, 2023	EFFECTIVE DATE January 27, 2023	COMMITTEE APPROVAL DATES 09/09/11, 01/09/13, 08/22/13, 06/30/14, 08/12/15, 05/24/16, 11/28/16, 12/21/16, 10/10/17, 05/01/18, 09/02/18, 03/13/19, 12/11/19, 05/13/20, 02/10/21, 08/11/21, 09/08/21, 01/12/22, 02/09/22, 01/11/23	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
URAC STANDARDS HUM v8: UM 1-2; UM 2-1	NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT	
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

Indications for determining medical necessity for Hemodialysis Access Creation.

II. DEFINITIONS

Hemodialysis is a process of purifying the blood of a person whose kidneys are not working normally. This type of dialysis achieves the extracorporeal removal of waste products such as creatinine and urea and free water from the blood when the kidneys are in a state of kidney failure. Hemodialysis is one of three renal replacement therapies (the other two being kidney transplant and peritoneal dialysis). Hemodialysis requires vascular access. Three primary methods are used to gain access to the blood for hemodialysis: an intravenous catheter, an arteriovenous fistula (AV) and AV graft.

Arteriovenous fistula (AV fistula) is a surgical procedure where a vein is connected to an artery. This artificial connection allows the vein to become larger and for the walls of the vein to thicken, a process termed maturation. A mature fistula makes it easier for the vein to be punctured repeatedly for dialysis. Maturation typically takes three to six months to occur. An arteriovenous fistula is the preferred type of vascular access due to lower rate of infection and clot formation, resulting in greater longevity than other types of vascular access. However, not everyone is a good candidate for an arteriovenous fistula, particularly older patients, and patients with small veins.

AV Graft is considered if the patient is not a suitable candidate for an arteriovenous fistula. An arteriovenous graft is a piece of artificial tubing, generally made from Teflon or fabric, that is attached on one end to an artery, and on the other end to a vein. The tube is placed entirely under the skin and the tube itself is punctured during dialysis. An arteriovenous graft can in general be used two to three weeks after the operation. However, arteriovenous grafts are more prone to infection and clotting than fistulas. The lifespan of an arteriovenous graft is approximately two to three years.

Appropriate Use Criteria (AUC score) for a service is one in which the expected incremental information, combined with clinical judgment, exceeds the expected negative consequences by a sufficiently wide margin for a specific indication that the procedure is generally considered acceptable care and a reasonable approach for the indication. The ultimate objective of AUC is to improve patient care and health outcomes in a cost-effective manner but is not intended to ignore ambiguity and nuance intrinsic to clinical decision making.

Appropriate Care- Median Score 7-9

May be Appropriate Care- Median Score 4-6

Rarely Appropriate Care- Median Score 1-3

III. POLICY

Indications for approving a request for medical necessity are:

- A. It is recommended that preparation for kidney replacement therapy (dialysis or transplant) occur when a permanent state of end-stage renal failure has developed and it is presumed that the patient will require permanent renal replacement therapy over and above what can be accomplished by central venous access, as ascertained by a nephrologist. **(AUC Score 9)**^{1,2,3,4}

Limitations

- A. Requests for services that are part of a surveillance protocol for patients who are involved in a clinical trial are considered out of scope (OOS) for New Century Health and cannot be reviewed.

IV. PROCEDURE

- A. In order to review a request for medical necessity, the following items must be submitted for review:
 - 1. Progress note from the nephrologist or vascular surgeon that prompted the request (including pertinent labs)
 - 2. All non-invasive Vascular Studies performed applicable to the request
- B. Primary codes appropriate for this service: 36800-Insertion of cannula for hemodialysis, other purpose (separate procedure); vein to vein, 36810-Insertion of cannula for hemodialysis, other purpose (separate procedure); arteriovenous, external (Scribner type), 36815-Insertion of cannula for hemodialysis, other purpose (separate procedure); arteriovenous, external revision, or closure, 36818-Arteriovenous anastomosis, open; by upper arm cephalic vein transposition, 36819-Arteriovenous anastomosis, open; by upper arm basilic vein transposition, 36820-Arteriovenous anastomosis, open; by forearm vein transposition, 36821-Arteriovenous anastomosis, open; direct, any site (e.g., Cimino type), 36825-Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft, 36830-Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate

procedure); non-autogenous graft (e.g., biological collagen, thermoplastic graft), and 36835- Insertion of Thomas shunt (separate procedure). Unilateral Venogram-36005- Injection procedure for extremity venography (including introduction of needle or intra catheter), 36010-Introduction of catheter, superior or inferior vena cava, 36011- Selective catheter placement, venous system; first order branch (e.g., renal vein, jugular vein), 75820- Venography, extremity, unilateral, radiological supervision and interpretation, 75822-Venography, extremity, bilateral, radiological supervision, and interpretation.

V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department
- B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

- A. None

VII. REFERENCES

1. Accessed through http://www.kidney.org/professionals/KDOQI/guidelines_ckd/toc.htm
2. Hirth RA, et al. Predictors of type of vascular access in hemodialysis patients. *Journal of the American Medical Association*. Oct 1996. Volume 276, Issue 16, Pages 1303-8
3. Ifudu O, et al. Determinants of type of initial hemodialysis vascular access. *American Journal of Nephrology*. 1997. Volume 17, No 5, Pages 425-427.
4. Robert C. Hendel MD, FACC, FAHA, et al. Appropriate use of cardiovascular technology: 2013 ACCF appropriate use criteria methodology update: a report of the American College of Cardiology Foundation appropriate use criteria task force. *Journal of the American College of Cardiology*. March 2013, Volume 61, Issue 12, Pages 1305-1317.
5. NCQA UM 2022 Standards and Elements.