Responsible Department/Division/Committee:

Graduate Medical Education Committee

Purpose:

All residents/fellows involved in central venous access insertions must be supervised by an attending physician OR a resident/fellow currently credentialed to perform central line insertions until properly credentialed to perform the procedure independently.

This reduces the risk of intravascular catheter related complications by standardizing the insertion of central venous access devices (CVAD) through education and credentialing.

Definitions:

Central Venous Catheter (CVC) is a catheter placed in a central vein for therapeutic use.

Simulation Trainer is an attending physician privileged to perform central line insertions OR a resident/fellow who has completed the online training and received a passing grade AND is currently certified to perform central line insertions without direct supervision. All procedures done in a simulation environment for credentialing purposes must be under the direct supervision of a simulation trainer.
**Credentialed/Privileged Practitioner** is an attending physician currently privileged to perform central line insertions or a resident/fellow currently credentialed to perform central line insertions without direct supervision.

**Procedures:**

The following requirements pertain to all incoming residents/fellows involved in central venous access insertions.

All Residents/Fellows involved in central venous access insertions are required to (in the order indicated):

1. Complete online orientation education, and

2. Obtain a grade of at least 80% on the module post-test. Upload the certificate to New Innovations.

3. Demonstrate insertion of CVCs with ultrasound guidance when indicated in a simulated environment (prior to allowing insertions in patients).
   - Ultrasound training will include: positioning of the probe, identification of the vessel, identification of the needle tip entering the vessel and identification of the guidewire within the vessel.
   - A minimum on one CVC insertion per site must be placed satisfactorily using simulation and evaluation tools completed by SIM center trainer.
   - The completed evaluation tools will be forwarded to the GME office and uploaded to New Innovations. Once the resident has successfully completed the SIM center training, the GME office will credential the resident in New Innovations for “central line insertion in internal jugular OR subclavian OR femoral site under direct supervision”. The resident may then place CVCs in patients under direct supervision of a practitioner credentialed/privileged to insert CVCs.

4. Under direct supervision of a certified/privileged practitioner the resident must perform the required number of insertions per site on patients, except for Anesthesiology residents (refer to section on Anesthesiology resident credentialing).
   - Internal Jugular Site – at least 3 insertions with ultrasound.
   - Subclavian Site – at least 3 insertions.
   - Femoral Site – at least 3 insertions with ultrasound.
5. The resident/fellow must log all procedures (site specific) in New Innovations as they are performed and identify the supervising physician. The Certified/privileged supervising physician must verify competency by electronically signing off on the procedure logged by the resident/fellow.

6. The final insertion must be directly supervised by an attending or fellow.

7. Upon notification from GME that the required number of CVC insertions have been completed satisfactorily for a particular site, the program director or designee will manually certify the resident/fellow in NI for that site.

Anesthesiology Resident Credentialing

All anesthesiology residents under direct supervision of a certified/credentialed trainer/practitioner:

1. Must successfully insert three lines in the internal jugular site as a CA1 (PGY2)
   - The resident must log the procedures in NI and identify the supervising practitioner.
   - The supervising/credentialed physician must attest in New Innovations that the resident performed the procedure satisfactorily.
   - Upon notification from GME that all insertions have been completed, the program director or designee will manually certify the resident in New Innovations.
   - The program director may certify the resident directly in New Innovations for insertions performed intraoperatively with faculty supervision and entered into ACGME case logs.

2. Once certified in a primary site, Anesthesiology resident/fellow may be certified in a secondary site if:
   - 3 insertions are performed under direct supervision of a certified/privileged practitioner.
The procedures can be logged in New Innovations and electronically attested to by the credentialed/privileged provider.

The program director may certify the resident directly in New Innovations for secondary site insertions performed intraoperatively with faculty supervision and entered into ACGME case logs.

If an anesthesiology resident/fellow has been certified to insert a CVC at the primary site and must move to a secondary site prior to receiving certification, the resident/fellow must be supervised by a practitioner credentialed/privileged in that site-specific procedure.

Maintenance of Certification

Log a minimum of 2 central lines in New Innovations per year or demonstrate competency to insert CVCs in a simulation environment under the direct supervision of a simulation trainer with completion of checklist.

**Forms:** (Ctrl-Click form name to view)

None

**Policy Cross Reference:** (Ctrl-Click policy name to view)

PC0104 Insertion of Central Venous Access Devices  
RAPC0020 Power Injection Through Peripheral and Central Lines  
N UPC2034 Management of Central Venous Access Devices (CVAD)  
CVAD Management of Complications

**Relevant Standards/Codes/Rules/Regulations/Statutes:**

None

**References and Resources:**

None