GEISINGER ALGORITHM FOR IDENTIFYING PATIENTS WITH AN ABDOMINAL AORTIC ANEURYSM

CASE TYPE 1:

Subject

- is not an Exclude Type 1
- is not an Exclude Type 2

AND

- has undergone one or more AAA repair procedures based on the following CPT codes:

- **34800** (Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using aorto-aortic tube prosthesis)
- **34802** (Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using modular bifurcated prosthesis (1 docking limb))
- **34803** (Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using modular bifurcated prosthesis (2 docking limbs))
- **34804** (Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using unibody bifurcated prosthesis)
- **34805** (Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using aorto-uniiliac or aorto-unifemoral prosthesis)
- **34830** (Open repair of infrarenal aortic aneurysm or dissection, plus repair of associated arterial trauma, following unsuccessful endovascular repair; tube prosthesis)
- **34831** (Open repair of infrarenal aortic aneurysm or dissection, plus repair of associated arterial trauma, following unsuccessful endovascular repair; aorto-bi-iliac prosthesis)
- **34832** (Open repair of infrarenal aortic aneurysm or dissection, plus repair of associated arterial trauma, following unsuccessful endovascular repair; aorto-bifemoral prosthesis)
- **35081** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysm, pseudoaneurysm, and associated occlusive disease, abdominal aorta)
- **35082** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for ruptured aneurysm, abdominal aorta)
- **35091** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysm, pseudoaneurysm, and associated occlusive disease, abdominal aorta involving visceral vessels (mesenteric, celiac, renal))
- **35092** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for ruptured aneurysm, abdominal aorta involving visceral vessels (mesenteric, celiac, renal))
- **35102** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysm, pseudoaneurysm, and associated occlusive disease, abdominal aorta involving iliac vessels (common, hypogastric, external))

- ➢ **35103** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for ruptured aneurysm, abdominal aorta involving iliac vessels (common, hypogastric, external))
- ➢ **35131** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysm, pseudoaneurysm, and associated occlusive disease, iliac artery (common, hypogastric, external))
- ➢ **35132** (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for ruptured aneurysm, iliac artery (common, hypogastric, external))

*Note that for Case Type 1, the patient's most recent encounter does not need to be within the past 5 years.

CASE TYPE 2:

Subject

- is not a Case Type 1
- is not an Exclude Type 1
- is not an Exclude Type 2

AND

- has had one or more visits to the vascular clinic/lab/department that resulted in the following diagnosis:

    - ➢ 441.3 (Abdominal aortic aneurysm, ruptured)

*Note that for Case Type 2, the patient's most recent encounter does not need to be within the past 5 years.

CASE TYPE 3:

Subject

- is not a Case Type 1
- is not a Case Type 2
- is not an Exclude Type 1
- is not an Exclude Type 2

AND

- has had two or more visits to the vascular clinic/lab/department that resulted in a diagnosis of:
    - ➢ 441.4 (Abdominal aortic aneurysm, without mention of rupture)

AND

- Subject's most recent encounter was within the past 5 years.

CONTROLS:

Subject

- does not qualify for exclusion

AND

- does not qualify for as a Case

AND

- most recent encounter was within the past 5 years.

AND

- has never had any of the following ICD9 Code diagnoses*:
- ➢ 441.3 (Abdominal aortic aneurysm, ruptured)
- ➢ 441.4 (Abdominal aortic aneurysm, without mention of rupture)
- ➢ 441.9 (Aortic aneurysm of unspecified site without mention of rupture)

*This condition applies to all departments within the system and at any point in the patient's medical history.

EXCLUDES:

EXLUDE TYPE 1:

Exclude if subject has any of the following ICD9 Code diagnoses:

- ➢ 759.82 (Marfan Syndrome)
- ➢ 756.83 (Ehlers-Danlos Syndrome)
- ➢ 441.1 (Thoracic Aneurysm, ruptured)
- ➢ 441.2 (Thoracic Aneurysm without mention of rupture)
- ➢ 441.7 (Thoracoabdominal aneurysm without mention of rupture)
- ➢ 443.2 (Other arterial dissection)
- ➢ 437.5 (Moyamoya Disease)
- ➢ 447.8 (Fibromuscular Dysplasia)

EXLUDE TYPE 2:

Exclude if subject was younger than 40 or older than 89 years of age at the time of encounter.

EXLUDE TYPE 3:

Exclude if subject

TYPE 3a

> ➢ Is not a Case Type 1

OR

> ➢ Is not a Case Type 2

AND

> ➢ Has not had an encounter in the last 5 years.

OR

TYPE 3b

> ➢ Is not a Case 1, 2 or 3

AND

> ➢ Has ICD9 code 441.[x]