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Issue Statement - Computed Tomographic Angiography (CTA) for coronary artery disease (CAD)

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According to the American Heart Association, present trends in the United States are indicating that half of healthy 40-year-old males will develop coronary artery disease (CAD) in the future, as will one in three healthy 40-year-old women.

CAD is the end result of the accumulation of plaques within the walls of the arteries that supply the heart with oxygen and nutrients. Most individuals with CAD show no evidence of disease for many years while the condition progresses before the first onset of symptoms—oftentimes a sudden heart attack. Sadly, the disease is the most common cause of sudden death.

Diagnosing CAD before it is too late is a challenge for clinicians and often requires coronary angiography, a minimally invasive procedure. Computed Tomographic Angiography (CTA) produces detailed, 3-D volumetric pictures of the heart and blood vessels. Similar to using a camera with a fast shutter speed to take an action shot, CTA is able to capture images with a high level of detail, giving precise anatomical detail of blood vessels which enables clinicians to diagnose and appropriately treat CAD.

Compared to conventional catheter angiography, which involves placing a sizable catheter into a large artery, CTA is a much less invasive and more patient-friendly procedure.