**Triad Isotopes, Inc. Perspectives and Efforts of a Nuclear Pharmacy to Support the Use of non-HEU Mo-99 for Tc-99m Compounded Patient Preparations**

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**ABSTRACT**

The American Medical Isotope Production Act was enacted to promote the production of non-highly enriched uranium (non-HEU) Molybdenum-99. The nuclear pharmacy has an important role in this by dispensing radiopharmaceutical preparations that have been compounded using the daughter isotope Tc-99m procured from non-HEU Mo-99. The nuclear pharmacist uses the sodium pertechnetate Tc99m to bind to various pharmaceutical ligands for use in a myriad of patient diagnostic scans.

The road to having reliable access to sodium pertechnetate Te99m involves many stakeholders, including producers, manufacturers, nuclear pharmacies, the nuclear medicine department, and the patient. While the mandate to use non-HEU Mo-99 has been top down, there is disproportionate demand for non-HEU Tc-99m from the bottom up. While mandatory conversion will eventually correct this issue, increases in costs will need to somehow find a payer. In the meantime, identifying why there is no incentive to increase need for this special supply is critical.