

Title	Optimizing health system use of medical isotopes and other imaging modalities
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Reference	CADTH Optimal Use Report, volume 2, issue 1A, 2012. Available from: http://www.cadth.ca/media/pdf/H0504_Medical_Isotopes_final-Report_wAppen_e.pdf

Aim

To provide national guidance on the optimal use of the medical isotope technetium-99m (^{99m}Tc) during a situation of reduced supply.

Conclusions and results

In the event of a disruption in supply, the allocation of the medical isotope technetium-99m (^{99m}Tc) used in medical diagnostic imaging should follow an evidence-informed framework while considering both the available alternatives and local context. Alternatives to diagnostic imaging and other contextual elements are unique to each setting where ^{99m}Tc use must be prioritized during a supply disruption. It is best to customize the information to each circumstance when deciding how best to allocate ^{99m}Tc .

Methods

Multi-criteria decision analysis (MCDA) was used to create a prioritized list of possible courses of action in the event of a reduced supply of ^{99m}Tc . A nationally representative group of experts, through a series of discussions and taking a national perspective, defined, prioritized and consented to a list of possible actions to guide decision-makers. Recognizing that there are jurisdictional differences in supply and circumstances, for which a national perspective might not be suitable, the group also created a web-based tool to aid in the creation of customized priority lists suitable for use by different jurisdictions. The MCDA process has four basic steps: Development of relevant criteria; identification of the possible courses of action (in this instance, the most common clinical uses of ^{99m}Tc); formal evaluation of each possible course of action; and, formulation of priorities and recommendations.

Written by

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