Annex B. NM Diagnostic activity by country – Data sources and comparability

Estimates of the number of procedures in Chapter 2 are collated from various sources described in the table below. Some estimates include all NM diagnostic procedures for which the use of Tc-99m is possible (single- and multi-phase planar scintigraphies, SPECT and SPECT/CT), irrespective of the radioisotope actually used, while some estimates only include procedures using Tc-99m. All estimates exclude NM diagnostic procedures for which the use of Tc-99m can be ruled out (e.g. PET).

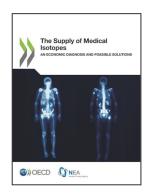
Estimates in of the proportion of procedures by organ system in Chapter 2 are based on the same data sources and described below. For Australia, only Medicare statistics are used to estimate the proportion of scans by organ systems; no data are available on activity in public hospitals and other providers that are not subsidised by Medicare.

Table A B.1. Data on the number of NM diagnostic scans by country

Data sources and comparability

Country	Year	Source	Notes
Australia	2017	Medicare Statistics 2018; ANSTO press releases	Includes all NM diagnostic procedures subsidised by Medicare, based on MBS items in "Group:14 Nuclear Medicine Imaging." MBS billing codes are not always specific to the isotope used; excludes MBS items for which use of Tc-99m can be ruled out. Medicare assumed to represent 70% of total (excluding scans in public hospitals), based on ANSTO estimates of Australian Tc-99m market size.
Austria	2007-10	European Commission RP Report 180	Tc-99m only
Belgium	2015-17	OECD HD survey, estimated based on several national surveys	Excludes services where radioisotope can be identified as non-Tc-99m.
Canada	2015-17	CADTH The Canadian Medical Imaging Inventory 2017; OECD HD survey	CADTH reports number of SPECT and SPECT-CT scans by province and for all of Canada; sum of SPECT and SPECT-CT assumed to represent 65% of total based on SPECT and SPECT-CT reported by CADTH and total number of NM scans in BC and Manitoba reported in OECD Health Division Survey. Tc-99m assumed to represent 85% of total.
Czech Republic	2007-10	OECD HD survey	Tc-99m only
Denmark	2007-10	EC RP180	Tc-99m only
Estonia	2007-10	EC RP180	Tc-99m only
Finland	2007-10	EC RP180	Tc-99m only
France	2017	L'Assurance Maladie	Includes all NM diagnostic scans per the national nomenclature of medical procedures CCAM in inand out-patient settings of private and public providers, except PET. Tc-99m assumed to

Country	Year	Source	Notes
			represent 85% of total.
Germany	2015	Hellwig et al. 2017 based on national KBV and G-DRG statistics	All outpatient NM diagnostic procedures paid by SHI except PET, and inpatient scintigraphy, SPECT and SPECT/CT procedures coded to G-DRGs. Outpatient activity broken down by isotope; data on inpatient activity does not isolate Tc-99m. Outpatient SHI sector assumed to represent 90% of total SHI and private insurance activity.
Greece	2007-10	EC RP180	Tc-99m only
Hungary	2007-10	EC RP180	Tc-99m only
Ireland	2007-10	EC RP180	Tc-99m only
Italy	2007-10	EC RP180	Tc-99m only
Japan	2017	Subcommittee on Survey of Nuclear Medicine Practice in Japan, Report of the 8th Nationwide Survey in 2017	Tc-99m only, representing 61% of all NM diagnostic scans excl. PET.
Latvia	2017	OECD HD survey	Tc-99m only
Lithuania	not specified	OECD HD survey	Tc-99m only; midpoint of range provided in response to OECD Health Division survey (5 800 to 6 400 Tc-99m scans / per year).
Luxembourg	2016	OECD HD survey	All NM diagnostic procedures excl. PET. Tc-99m assumed to represent 85% of total.
Netherlands	2015	OECD HD survey	Tc-99m only; all NM diagnostic procedures excl. PET based on results of a national provider survey provided by respondents to the OECD HD survey. Tc-99m assumed to represent 85% of total.
Poland	2007-10	EC RP180	Tc-99m only
Portugal	2007-10	EC RP180	Tc-99m only
Slovak Republic	2007-10	EC RP180	Tc-99m only
Slovenia	not specified	OECD HD survey	Tc-99m only
Spain	2007-10	EC RP180	Tc-99m only
Sweden	2017	OECD HD survey	Tc-99m only
United Kingdom (England)	FY 2016/17	NHS England Diagnostic Imaging Dataset	All Tc-99m scans in NHS hospitals (in- and outpatient). England assumed to represent 85% of UK total based on population.
United States	2014	IMV 2015 Nuclear Medicine Benchmark Report	Based on IMV Medical Information Division 2015 survey of U.S. hospitals and non-hospitals that perform NM procedures using fixed SPECT/CT, SPECT, and planar only cameras. A total of 407 respondents, 283 from hospitals and 124 from non-hospital locations, extrapolated to a provider population of 7 091 sites (4 040 hospitals and 3 051 non-hospital locations). Tc-99m assumed to represent 85% of total.



From:

The Supply of Medical Isotopes

An Economic Diagnosis and Possible Solutions

Access the complete publication at:

https://doi.org/10.1787/9b326195-en

Please cite this chapter as:

OECD/Nuclear Energy Agency (2019), "NM Diagnostic activity by country – Data sources and comparability", in *The Supply of Medical Isotopes: An Economic Diagnosis and Possible Solutions*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/ac33aeaf-en

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