

OECD Health Statistics 2023

Definitions, Sources and Methods

Magnetic Resonance Imaging units

Number of **Magnetic Resonance Imaging units** (MRI units).

MRI is an imaging technique designed to visualise internal structures of the body using magnetic and electromagnetic fields which induce a resonance effect of hydrogen atoms. The electromagnetic emission created by these atoms is registered and processed by a dedicated computer to produce the images of the body structures.

Sources and Methods

Australia

Source of data:

- **Australian Department of Health**. Magnetic Resonance Imaging (MRI). Data for 2001 to 2014 are either from unpublished estimates or from Diagnostic imaging.

<http://www.health.gov.au/internet/main/publishing.nsf/Content/pathol-di-mri-index2>.

- **Australian Department of Health and Ageing 2000**. Report of the Review of Magnetic Resonance Imaging March 2000. Canberra: Commonwealth of Australia.

- **Health Insurance Commission**. Unpublished data.

Reference period: Years reported are financial years 1st July to 31st June (e.g. data for 2012 are as at 30th June 2012).

Coverage:

- MRI units are assumed to be ambulatory if flagged as a ‘Mobile MRI unit’.

Break in time series: Note that data from 2000 onwards represent the number of units approved for billing to Medicare only. In 1999, these represented approximately 60% of total units.

Note: The large increase in the number of MRI units between 2012 and 2013 is due to a Government program, the 2012 MRI Expansion initiative. As a result of this initiative approximately 200 further MRI units have Medicare eligibility (that is, they are accessible as publicly funded healthcare).

Note: During the first wave of COVID-19 in Australia at the beginning of 2020, diagnostic imaging services decreased significantly. Existing imaging practices have chosen to consolidate their existing practices and services, resulting in a halt in the expansion of diagnostic imaging practices in Australia. In addition, there have been significant delays in the global supply chain for the replacement and upgrade of machines.

Austria

Source of data: **Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection** (Gesundheit Österreich GmbH, Monitoring of Medical Technology Development).

Reference period: 31st December.

Coverage:

- Included are all MRI units in hospitals as defined by the Austrian Hospital Act (KAKuG) and classified as HP.1 according to the System of Health Accounts (OECD).

- The ambulatory sector is included (HP.3).

Belgium

Source of data:

Hospital (HP.1): **Federal Service of Public Health, DGGS** “Organisation of health provisions”; Ministry of the Flemish community and Ministry of the French community.

- Since 2016, data are based on the national registry for devices of medical image. Up to 2015, data were based on a hospital questionnaire.

Ambulatory care providers (HP.3): Federal Agency for Nuclear control (FANC): licenses delivered for use of nuclear machinery.

Reference period: 31st December.

Coverage:

- *Hospital (HP.1):* Until 2015, data are based on a hospital questionnaire and correspond to the number of hospitals with this technology. From 2016 onwards, data are based on a national registry and correspond to the number of devices.

- *Ambulatory care providers (HP.3):* In principle, heavy medical machinery exams are not reimbursed in the ambulatory care sector.

Deviation from definition: Data correspond to the number of hospitals with MRI units (rather than the number of MRI units) till 2015.

Break in time series: Since 2016, data are based on the national registry for devices of medical image and correspond to the number of MRI-devices. MRI units for clinical as for scientific use are included.

Canada

Source of data:

- 1982-2001: **Canadian Coordinating Office for Health Technology Assessment (CCOHTA)**, renamed the Canadian Agency for Drugs and Technology in Health (CADTH) in April 2006, *National Inventory of Selected Imaging Equipment*.

- 2003-2012: **Canadian Institute for Health Information**, *National Survey of Selected Medical Imaging Equipment*. See <https://www.cihi.ca/en/types-of-care/specialized-services/medical-imaging>. Estimate for 2013.

- 2015, 2017 and 2019: **Canadian Agency for Drugs and Technology in Health (CADTH)**, *Canadian Medical Imaging Inventory*. See cadth.ca/medical-imaging.

Coverage:

- 1982-2001: The first MRI unit was installed in 1982. Surveys were not carried out in 1996, 1998, 1999 and 2002. MRI units in Quebec are not included in 2000. MRI units located in both hospitals and in free-standing imaging facilities are included. The number of units in free-standing imaging facilities was compiled for years prior to 2003 based on data collected in the 2003 National Survey of Selected Medical Imaging Equipment, conducted by the Canadian Institute for Health Information.

- 2003-2012: CIHI undertook a national survey of selected medical imaging equipment in 2003 similar to the survey conducted by CCOHTA in previous years. The survey was decommissioned in 2012. No survey was conducted in 2008. The CIHI survey tracked data on machines installed in Canadian hospitals and those in free-standing imaging facilities (sometimes called “non-hospital”, “community-based”, and /or “private” facilities). As at 1st January 2012, there were 242 MRI units in hospitals and 66 MRI units in free-standing imaging facilities.

- 2013: The 2012 MIT survey collected the number of MRI units installed after 1st January 2012. This number was added to the 2012 number to get the total count of MRI units installed as of 1st January 2013.

- 2015, 2017 and 2019: In 2015, CADTH has taken on the collection of data on medical imaging technologies in Canada and will continue to maintain the national inventory and publish a report of the findings every two years. The unit counts were supplied to CADTH by provincial validators and include units in publicly funded sites only in 2015 while they also include some privately funded units in 2017 and 2019. For the years 2015 and 2017, no distinction between units in hospitals and free-standing imaging facilities is available from CADTH’s reports *The Canadian Medical Imaging Inventory, 2015* and *The Canadian Medical Imaging Inventory, 2017* published on cadth.ca/medical-imaging.

Chile

Source of data: **Ministry of Health, Investment Division.**

- The data collection was conducted through an annual survey from the Ministry of Health to all country health services (by the office of Secretary for Care Networks, addressed to the Directors of Health and Experimental Centres, and Chief of the local Imaging Departments).

Methodology: The methodology used was to ask providers of this type of equipment their installed base of equipment in operation, for both public and private area.

Coverage:

- Public and private sector

- The information submitted reflects the capacity up to 31st December, available in both public and private sectors of Health.

- Hospitalisation (Hospitals and Clinics) and ambulatory care (Medical Offices and clinics of specialties). Some

equipment may be used for both hospital and outpatient care (they are shared equipment).

Break in time series: in 2013, there was a change in the methodology of the survey.

Colombia

Source of data: Hospital Information System (SIHO), **Ministry of Health and Social Protection**.

Coverage: Data correspond only to public healthcare providers (IPS). Private IPS are not included.

Costa Rica

Source of data:

- *From 2022:* Sistema Contable de Bienes Muebles de la **Caja Costarricense de Seguro Social** (Accounting System of Personal Property of the National Social Security Fund) and Annual Report from Private hospitals.

- *Till 2021:* Sistema Contable de Bienes Muebles de la **Caja Costarricense de Seguro Social** (Accounting System of Personal Property of the National Social Security Fund).

Coverage:

- *From 2022:* All public hospitals and some private hospitals.

- *Till 2021:* Data correspond only to public hospitals belonging to the Social Insurance.

Break in time series: 2022 (inclusion of some private hospitals).

Czech Republic

Source of data: **Institute of Health Information and Statistics of the Czech Republic**; Survey on medical apparatus in health establishments.

Reference period: 31st December.

Coverage:

- Until 1999, only establishments of the health sector covered. From the year 2000, data cover all sectors.

- Data under HP.1 encompasses all bed care health establishments and HP.3 all other health establishments.

Break in time series: 2000.

Denmark

Source of data: 2021 The Capital Region, Medusa. The 2009 data have been provided by the Danish Regions.

Coverage: Only MR-scanners from the Capital Region in 2021.

Estimation method: Underestimation, due to the fact that the number only refers to MRI Units in one region in 2021.

Break in time series: 2021, see 'Coverage'.

Estonia

Source of data: **National Institute for Health Development**, Department of Health Statistics (since 2005).

Reference period: 31st of December.

Coverage:

- All providers. Since 2006 data have been included in the annual reports ("Health Care Provider").

- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of healthcare providers.

- Data are collected from hospitals and ambulatory care providers.

Deviation from the definition:

- The devices may also include combined devices like PET-MRI, and it is possible that up to 2014 these devices are counted under both categories (i.e., under PET and MRI units). The number of combined devices is not available.

The first combined devices were purchased in 2007. From 2015 the combined devices PET-MRI are counted under PET category only.

- Due to the changes in the HP coding in 2014 according to the SHA2011 some providers, previously classified under HP3, were classified under HP4. To avoid data loss since 2014 also HP4 providers are included under category "ambulatory care".

Finland

Source of data: **Radiation and Nuclear Safety Authority Finland** and **university hospitals**.

Coverage: All hospitals.

France

Source of data: **Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques** (DREES), Sous-Direction de l'Observation de la Santé et de l'Assurance maladie, Bureau des Établissements de santé. Data are from **FINESS**.

Reference period: Equipment in service during the year (not necessarily during the whole year).

Coverage: Data refer to metropolitan France and D.O.M. (overseas departments).

Break in time series: 2015, 2019.

- During the year 2015, the source of data FINESS has been improved concerning the equipment: the source keeps now a better record of all the equipment actually in use. This improvement results in a higher number of equipment for 2015.

- Count of equipment in FINESS data changed in 2019: the repartition between ambulatory care equipment and hospital equipment has changed.

Germany

Stationary sector:

Source of data: **Federal Statistical Office**, Hospital statistics 2021 (basic data of hospitals and prevention or rehabilitation facilities); Statistisches Bundesamt 2022, *Fachserie 12, Reihe 6.1.1*, table 2.8.1 and internal tables; <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data on medical technology include equipment installed in all types of hospitals (HP.1) in all sectors (public, not-for-profit and private).

Ambulatory sector:

Source of data: **German Electrical and Electronic Manufacturers' Association** (ZVEI), Division "Medical Engineering"; special evaluation by the German Electrical and Electronic Manufacturers' Association. See <http://www.zvei.org>.

Reference period: 31st December.

Coverage:

- Data comprise the number of Magnetic Resonance Imaging units (MRI) installed in the ambulatory sector.

- From reporting year 2019 onwards, data on MRIs installed in the ambulatory sector is no longer collected.

Estimation method: As of reporting year 2019, the values for outpatient MRI devices will be updated by using a trend calculation. The presentation is rounded to full tens.

Greece

Source of data: **The Greek Atomic Energy Commission** (for HP1 & HP3) and **the Hospital Census of ELSTAT (HP1)**.

Reference period: 31st December.

Coverage: Country Total.

Hungary

Source of data:

- Until 1999, **Hungarian National Institute for Hospital and Medical Engineering** (ORKI).

- From 2000 to 2016, **Hungarian National Health Insurance Fund** (OEP), Statistical Yearbook.

<http://www.oep.hu>.

- From 2017: **National Institute of Health Insurance Fund Management** (NEAK, in Hungarian),

www.neak.gov.hu.

Reference period: 31st December.

Coverage:

- Until 1999, the Hungarian National Institute for Hospital and Medical Engineering (ORKI) registered all CT and MR equipment in public healthcare, regardless of whether care was provided to an outpatient or an inpatient.

- From 2000 the number contains only those MRI units which are owned by healthcare institutions that have contracted outpatient MRI examinations with the Hungarian National Health Insurance Fund (OEP in Hungarian) until 2016, and with the National Institute of Health Insurance Fund Management (NEAK in Hungarian) from 2017. Regardless, examinations can also be performed on inpatients on MRI units, only they are not funded by the health insurer in itemized billing, but in the general weight of the inpatient DRG.

Deviation from the definition:

- From 2000 the number does not include MRI units that only perform MRI scans on inpatients. Also, the number does not include MRI units that have not been contracted with the Hungarian National Health Insurance Fund (OEP in Hungarian) until 2016 and the National Institute of Health Insurance Fund Management (NEAK in Hungarian) from 2017, but operate exclusively in private financing.

Iceland

Source of data: **Icelandic Radiation Safety Authority.**

Reference period: 31st December.

Ireland

Source of data:

- From 2009: **Irish Association of Physicists in Medicine** (<https://iapm.ie/>).

- Up to 2008: **Siemens, Ireland.**

Reference period: Figures as at end of December.

Coverage:

- All figures are taken from the Association of Physicists in Medicine's licensing database and were calculated at the end of each calendar year.

- Figures reflect the number of machines licensed by the Association in Ireland. This designation is based upon data supplied from equipment users. Therefore, the figures reflect how the original users obtaining the license describe the equipment.

Break in time series: From 2009 onwards, there was a change in source.

Israel

Source of data: The data are based on the Medical Institutions License Registry maintained by the Department of Medical Facilities and Equipment Licensing and the Health Information Division in the **Ministry of Health.**

Reference period: End of the year.

Coverage: Includes all licensed MRI units (includes MRI for diagnosis, for research and I-MRI for surgery).

Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities.

The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy

Source of data: **Ministry of Health** - General Directorate of digitalisation, health information system and statistics - **Office of Statistics.** www.salute.gov.it/statistiche.

Reference period: 1st January.

Coverage: Available equipment both in hospital and territorial facilities is counted. Territory private facilities not accredited by the National Health Service are not covered. However, data on equipment in hospitals refer to both public and private hospitals, including private hospitals not accredited by the National Health Service.

Deviation from the definition: Territory private facilities not accredited by the National Health Service are not covered.

Estimation method: None

Break in time series: None

Japan

Source of data: **Ministry of Health, Labour and Welfare**, Survey of Medical Institutions (several issues).

Coverage:

- In hospitals only until 1999; and in all hospitals and medical clinics in 2002.

- The survey items on medical technology are included in the large-scale survey conducted every three years.
- Figures of 2011 exclude data of Ishinomaki medical area and Kesenuma medical area of Miyagi Prefecture, and Fukushima Prefecture.

Break in time series: 2002.

Korea

Source of data: **Health Insurance Review & Assessment Service**, Healthcare resources by provider.

Latvia

Source of data: **Centre for Disease Prevention and Control**; Statistical Report.

Reference period: 31 December.

Coverage:

- In 2021, data for 2003-2019 have been recalculated according to the definition.
- The number of MRI in HP.3 institutions also include MRI in HP.4.2 institutions.

Lithuania

Source of data: **Health Information Centre of Institute of Hygiene**, data of entire annual survey of health establishments. Report "Health Statistics of Lithuania", available from <http://www.hi.lt/health-statistic-of-lithuania.html>. Available on Official Statistics Portal of Statistics Lithuania <http://osp.stat.gov.lt/en>.

Reference period: 31st December.

Coverage: The number of functioning equipment.

Luxembourg

Source of data: **Direction de la Santé**, Division de la Radioprotection.

Reference period: Data as of December 31.

Coverage: Includes all equipment in use.

Mexico

- From 1990 to 2002: **Ministry of Health**. Bulletin of Health Information and Statistics. National Health System, Vol. 1, "Human and material health resources", 1990 to 2002.

- From 2003 to 2021: data are taken from the National Health Information System (SINAIS). The data source for private providers is **National Institute of Statistics and Geography** (INEGI). National Survey on Medical units with Inpatient Hospital Services.

Coverage:

- Includes information from public institutions (MOH, IMSS-Bienestar, Services of the Federal District, IMSS, ISSSTE, PEMEX, SEDENA, SEMAR, state health hospitals, university hospitals) and private providers.

- The observed increase probably is due to improvements in reporting and not to a real increase in equipment.

- From 2004 onwards, the equipment was identified by type of provider, using the same source, associating the unique ID included in the catalog of health establishments of health facilities (CLUES) by medical unit to confirm whether it is a hospital or ambulatory unit.

Netherlands

Source of data:

- 2006 onwards: **Annual reports social account** which the hospitals are required to deliver; the survey on imaging diagnostics is included in this report.

- Up to 2005: **Health Council**, Advisory Report on Nuclear Magnetic Resonance Imaging and Spectroscopy (The Hague, 1984); **Nationale Raad voor de Volksgezondheid** (National Board of Health), Advisory Report on MRI (Zoetermeer, 1993).

New Zealand

Source of data: **Royal Australian and New Zealand College of Radiologists**.

Coverage:

- As at 10 February 2022, there were 85 MRI machines in both public and private locations, this indicates an increase of 7 units from February 2021 - 4 additional units and 3 units at previously overlooked sites.
- As part of the 2023 OECD health data request, RANZCR adopted a new methodology of collecting the number of MRI units data and updated its MRI centres list. The new methodology includes the RANZCR's previous MRI location list, secondary research, and Te Whatu Ora Geo mapping list. This resulted in an increase in MRI machines, some new machines and few which were missing from the old database.
- As at 13 February 2023, there were 102 MRI machines in both public and private locations, this indicates an increase of 17 units from February 2022.
- There were two MRI machines which are primarily used for research purposes (not for public use) and therefore are not included in the total MRI units.
- It was seen that the increase in the number of MRI machines were primarily to cope with the increasing demand of magnetic resonance imaging and to reduce the wait times for the lifesaving scans.
- These are the figures the College believes to be accurate. This is not an estimation, rather a reflection of physical resources currently in use.
- The database does not distinguish between hospital and ambulatory care settings.

Break in time series: 2022. The increase in 2022 is partly due to the methodological change mentioned above.

Norway

Source of data: **The Norwegian Radiation and Nuclear Safety Authority (DSA).** Undertakings that expect to acquire, lease, use or handle radiation sources that are subject to registration shall register their activities and each radiation source to DSA via DSA's radiation source registration system (<https://ems.dsa.no/>). Equipment that is no longer in use is also reported through the same registration system.

Reference period: The reported data include registrations of equipment that have been registered and processed by DSA as of December 31 each year. Due to delays in the processing of registrations the actual number of equipment might be slightly higher or lower than reported on this date.

Coverage:

- PET/MR and veterinary use is not covered.
- Equipment is reported for HP.1 and HP.3 together (hospital and ambulatory sector). It is not possible to differentiate between HP.1 and HP.3 in the source data.
- The reported data is limited to equipment that is subject to authorization from DSA according to the Radiation Protection Regulations (see "Strålevernforskriften på engelsk" here: <https://dsa.no/regelverk>). DSA's radiation source registration system was updated in 2016, and data before this is therefore not easily accessible.
- There is a large increase in MRI units from 2020 to 2021. There have been some new installations (17) in 2021, but this doesn't explain the whole increase. There have probably been some units which have not been reported earlier.

Poland

Source of data:

In year 2013 and earlier:

Ministry of Health:

- MZ-12 - report on activity and workers in outpatient specialised healthcare. Data as at 31st December.
- MZ-29 - report on activity of general hospital. Data as at 31st December.

Ministry of Interior and Administration:

- MSW-33 - report on nursing and residential care facilities. Data are collected on an annual basis. Data as at 31st December.

From 2014 to 2018:

Ministry of Health:

- MZ-11 - report on activity and workers in outpatient healthcare. Data as at 31st December.
- MZ-29 - report on activity of general hospital. Data as at 31st December.

Ministry of Interior and Administration:

- MSW-33 - report on nursing and residential care facilities. Data are collected on an annual basis. Data as at 31st December.

Since 2019:

Ministry of Health:

- MZ-11 - report on activity and workers in outpatient healthcare. Data as at 31st December.
- MZ-29 - report on activity of general hospital. Data as at 31st December.

Ministry of Interior and Administration:

- MSWiA-32 - report on the outpatient activities of independent public healthcare units. Data as at 31st December.
- MSWiA-43 - report on activities of general hospital and specialised hospital. Data as at 31st December.

Break in time series:

- 2014: change in data source as described above.
- 2019: change in data source as described above.

Portugal

Source of data:

- For all sectors (inpatient and outpatient facilities) of public hospitals in the mainland: **Ministry of Health** - Survey of High-tech Facilities.
- For inpatient facilities (official and private hospitals): **Hospital Survey**.

Coverage:

- Data include the total installed equipment.
- Since 2009, data are only available for MRI units in hospitals.

Slovak Republic

Source of data: **National Health Information Center**.

Reference period: 31st December.

Coverage: Medical technologies available regardless of frequency of use.

Type of healthcare facilities:

- HP.1 (hospital) - Institutional care including out-patient units included in general hospital, specialised hospital and sanatorium.
- HP.3 (ambulatory sector) - Out-patient healthcare included in general out-patient care unit, specialised out-patient care unit, emergency out-patient unit, facility providing day care, residential healthcare unit, healthcare centre, nursing care service, facility for common.

Break in time series: The increase in the availability of medical equipment in ambulatory setting in year 2014 is caused by purchase of new equipment and the expansion of the number of reports from statistical units which have been sent to National Health Information Center.

Slovenia

Source of data: **Slovenian Radiation Protection Administration**, Registry of radiation sources in medicine and veterinary medicine and **Health Insurance Institute of Slovenia**.

Reference period: 31st December.

Coverage: Refers to all institutions in Slovenia.

Spain

Source of data:

- 1984 and 1988: Pablo Lázaro y de Mercado. "Evaluación de Servicios Sanitarios: La Alta Tecnología en España".

Fondo de Investigaciones Sanitarias de la Seguridad Social (F.I.S).

- From 1992 to 2009: **Ministry of Health** from National Catalogue of Hospitals (several issues).
- Since 2010: **Ministry of Health** from **Specialised Care Information System** (Sistema de Información de Atención Especializada - SIAE).

<http://www.sanidad.gob.es/estadEstudios/estadisticas/estHospiInternado/inforAnual/homeESCRI.htm>.

Reference period: 31st December.

Coverage:

- Until 2009, data from National Catalogue of Hospitals relate only to devices available in hospitals; they do not include equipment in other healthcare facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.

Break in time series: 1992 and 2010.

- Change in data source.

- Information about medical technology and diagnostic activity for centers HP.3 included since 2010.

Sweden

Source of data:

- **Swedish Association of Local Authorities and Regions** (earlier Federation of Swedish County Councils). Statistics collected mainly from healthcare Regions and The Swedish Radiation Safety Authority.

Reference period:

- 2015 December.
- 2016 December.
- 2017 December.
- 2018 December.
- 2019 December.

Coverage:

- Most of the healthcare givers from local regions are included. Some non-radiation equipment owned by private healthcare providers may be excluded.
- Two regions have not reported data for 2022; for these two regions imputation have been done using their data from 2021.

Switzerland

Source of data: **Federal Statistical Office (FSO)**, Neuchâtel, Hospital Statistics; yearly census.

Reference period: Data as of December 31.

Coverage: Only hospitals are covered (full-survey).

- The data refer to the number of equipment available in hospitals (HP.1) only.
- Hospital Statistics have been revised (data year 2010); new counting of all equipment.

Türkiye

Source of data: **General Directorate for Health Services, Ministry of Health.**

Reference period: It is the number of MRI units belonging to the institutions serving during the year. If the institution closed during the year, the data belongs to the date of closing. If not, the data dated 31 December is used.

Coverage:

- Data cover the number of devices in the MoH, universities, private and other sector (other public establishments, local administrations and since 2012 MoND-affiliated facilities) as well as those used by outsourcing in Türkiye.

United Kingdom

Source of data:

- **England:** NHS. Health Protection Agency, now Public Health England. 2019 onwards: NHS Improvement Annual Census.
- **Scotland:** Scottish Healthcare Supplies (for 2004 and 2005 data).
- **Wales:** Welsh Health Estates.
- **Northern Ireland:** Social Services and Public Safety (for 2004 and 2005 data).

Coverage:

- 2019 onwards: England only at HP.1 hospitals.
- Does not include private sector.
- No data has been available from sources in Northern Ireland, Scotland and Wales in recent years.

Estimation method:

- 2000 to 2001 and 2008: Only available data were for England. UK estimate based on a pro-rata increase using UK population data.
- 2002 to 2003: Only Great Britain data available. UK estimate based on a pro-rata increase using UK population data.
- 2006: UK figure estimated as Scottish data unavailable. 2005 Scottish data used, following agreement with the Health Protection Agency.
- For 2010 onwards only available data was for England and Wales, and UK level figure was submitted based on a pro-rata increase using UK population data.
- No England and therefore UK data from 2015 to 2018.

- 2019 onwards England only census is adjusted (grossed up) to represent a UK value based upon a pro-rate population using the official Mid Year Population Estimates of UK Nations and the UK as a whole.

Break in time series:

- 2019 onwards data represent a break in any previous time series. From 2019, data is available for hospitals (HP.1) only.

United States

Source of data:

- **IMV Medical Information Division:** *Benchmark Reports*, MRI units, selected years: 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2010, 2007, 2006, and 2004. <http://www.imvinfo.com>.

Coverage:

- Nationwide. IMV's MRI reports utilize a survey methodology to query hospital and non-hospital sites in the United States performing MRI procedures using fixed MRI scanners or using mobile MRI services. The survey results are projected to the universe of identified MRI sites. Candidate MRI sites are identified using proprietary IMV databases, supplemented by the American Hospital Association's AHA guide (The AHA Guide to the Health Care Field), and site lists identified through secondary research.

- US territories are not included.

- The U.S. ambulatory sector data provides the estimated number of units in non-hospital sites which include: 1) imaging centres owned/co-owned by a hospital or healthcare systems, and 2) freestanding (i.e. independent) which includes owned or co-owned by radiology practices, multispecialty physician practices, orthopedics practices, or companies that own multiple imaging centers, and 3) estimates for MRI scanners in mobile MRI vans.

Excludes units in mobile vans that serve multiple sites (hospitals and non-hospitals).

- IMV does not include units dedicated to research - i.e. National Institute of Health and other research-only sites.

- A source of error in the sample is the possible omission of sites from the universe of all sites, which have thus far still escaped identification, particularly non-hospital sites.

Deviation from the definition: Data match the OECD definition.

Estimation method: Further information on the estimation method for the selected IMV Benchmark Reports can be found at <http://www.imvinfo.com>.

Break in time series: No breaks in time series.

NON-OECD ECONOMIES

Brazil

Source of data: National Registry of Health Establishments (Cadastro Nacional de Estabelecimentos de Saúde (CNES)).

Coverage:

- Total MRI machines per year: All existing type 12 - Magnetic Resonance equipment were accounted for.

- The situation at of December of each year was considered.

Bulgaria

Source of data: National Centre for Public Health and Analyses at the Ministry of Health.

Reference period: 31st of December.

Note: The number of MRI units in hospitals decreases due to their transfer to the outpatient health establishments.

Coverage: The study is with annual periodicity. All types of health establishments except hospices are included

Croatia

Source of data: Croatian Institute of Public Health, Medical Equipment Database.

Reference period: Status on December 31st.

Coverage: Data includes MRI units in all public and private hospitals and other healthcare providers in Croatia, except prison hospital.

Romania


Source of data: **National Institute of Statistics**, the activity of the sanitary and healthcare network – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage: For the period 2005-2006 the data covers all hospitals from public sector, starting with 2007 data refers to hospitals and ambulatory care units of public and private sector. Data collection for 2005 and 2006 does not cover ambulatory care sector (HP3).

Russian Federation

Source: **Federal State Statistics Service (ROSSTAT)**, Forms of Federal Statistical Survey, Form No 30 “Information on the network and activities of healthcare institutions”.

 **Break in time series in 2014:** Since 2014, the Russian Federation includes Krime Federal Okrug (Crimea).

Note: This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

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<http://www.oecd.org/health/health-data.htm>