# Medical technology

## Definitions

**Updated: October 2019**

Note: The aim is to collect data on the availability of the following medical equipment in the hospital sector (HP.1), the ambulatory sector (HP.3) and all health care facilities (HP.1+HP.3).

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Number of Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computed tomography scanners</strong></td>
<td>Number of <strong>Computed Tomography scanners</strong> (CT units).</td>
</tr>
<tr>
<td>A CT or CAT scanner is an x-ray machine which combines many x-ray images with the aid of a computer to generate cross-sectional views and, if needed, three-dimensional images of the internal organs and structures of the body.</td>
<td></td>
</tr>
<tr>
<td><strong>Exclusion</strong></td>
<td></td>
</tr>
<tr>
<td>- Single Photon Emission Computed Tomography (SPECT).</td>
<td></td>
</tr>
<tr>
<td><strong>Magnetic resonance imaging units</strong></td>
<td>Number of <strong>Magnetic Resonance Imaging units</strong> (MRI units).</td>
</tr>
<tr>
<td>MRI is an imaging technique designed to visualize 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.</td>
<td></td>
</tr>
<tr>
<td><strong>Inclusion</strong></td>
<td></td>
</tr>
<tr>
<td>- PET-CT systems using image fusion (superposition of CT and PET images).</td>
<td></td>
</tr>
<tr>
<td><strong>Positron emission tomography scanners</strong></td>
<td>Number of <strong>Positron Emission Tomography scanner units</strong> (PET units).</td>
</tr>
<tr>
<td>PET is a highly specialised imaging technique using short-lived radioactive substances. This technique produces three dimensional images which are used mainly for the assessment of cancer spread in a patient’s body.</td>
<td></td>
</tr>
<tr>
<td><strong>Inclusion</strong></td>
<td></td>
</tr>
<tr>
<td>- PET-CT systems using image fusion (superposition of CT and PET images).</td>
<td></td>
</tr>
<tr>
<td><strong>Gamma cameras</strong></td>
<td>Number of <strong>Gamma cameras</strong>.</td>
</tr>
<tr>
<td>A Gamma camera (including Single Photon Emission Computed Tomography, SPECT) is used for a nuclear medicine procedure in which the camera rotates around the patient to register gamma rays emission from an isotope injected to the patient’s body. The gathered data are processed by a computer to form a tomographic (cross-sectional) image.</td>
<td></td>
</tr>
<tr>
<td><strong>Inclusion</strong></td>
<td></td>
</tr>
<tr>
<td>- SPECT-CT systems using image fusion (superposition of SPECT and CT images).</td>
<td></td>
</tr>
<tr>
<td><strong>Mammographs</strong></td>
<td>Number of dedicated <strong>mammography machines</strong> (those designed exclusively for taking mammograms). The code is CIM-9 87.37.</td>
</tr>
<tr>
<td><strong>Radiation therapy equipment</strong></td>
<td>Number of machines used for treatment with x-rays or radionuclide.</td>
</tr>
<tr>
<td>They include linear accelerators, Cobalt-60 units, Caesium-137 therapy units, low to orthovoltage x-ray units, high dose and low dose rate brachytherapy units and conventional brachytherapy units.</td>
<td></td>
</tr>
<tr>
<td><strong>Digital Subtraction Angiography units</strong></td>
<td>Number of <strong>Digital Subtraction Angiography units</strong> (DSA units).</td>
</tr>
<tr>
<td>DSA technique combines a dynamic picture (obtained after contrast injection) with a static picture taken before contrast injection. Subtraction of these pictures</td>
<td></td>
</tr>
</tbody>
</table>
Lithotriptors

<table>
<thead>
<tr>
<th>Number of lithotriptors (or shock-wave lithotripsy units; LSI units).</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lithotriptor is an extracorporeal shock wave machine used to shatter kidney stones and gallstones.</td>
</tr>
</tbody>
</table>

Country specific notes

Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Iceland, Liechtenstein, Norway, Switzerland, Montenegro, North Macedonia, Albania, Serbia, Turkey, United Kingdom
Belgium

**Computed Tomography scanners**

- Since 2016, data are based on the national registry for devices of medical image. Up to 2015, data were based on a hospital questionnaire.
Reference period: 31st December.
Coverage:
- Until 2012, data correspond to the number of hospitals with this technology. From 2013 onwards, data correspond to the number of devices.
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.
Deviation from definition: Data correspond to the number of hospitals with CT scanners (rather than the number of CT scanners) until 2012.
Break in time series: 2013. From year 2013, data corresponds to the number of CT scanners and no more to the number of hospitals with CT scanners.

**Magnetic Resonance Imaging units**

- Since 2016, data are based on the national registry for devices of medical image. Up to 2015, data were based on a hospital questionnaire.
Reference period: 31st December.
Coverage:
- 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.
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.
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.

**Positron Emission Tomography scanners**

Source of data: 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.
Reference period: 31st December.
Coverage:
- Data correspond to the number of hospitals with this technology until 2012 and from 2013 to the number of PET-scanners (including PET-CT).
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.
Break in time-series: Since 2016, data are based on the national registry for devices of medical image. PET, PET-CT and PET-MRI are included.

**Gamma cameras**

Coverage:
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.

**Mammographs**


Coverage:
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.

**Radiation therapy equipment**


Reference period: 31st December.

Coverage:
- Data include simulator units, accelerator units, cobalt units, contact therapy and stereotactic radiotherapy.
- From 2013: Radiation therapy equipment = linear accelerator, cobalt units, units for rotation therapy, surface and contact therapy equipment, stereotactic radiotherapy equipment, intraoperative radiotherapy.
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.
- Data correspond to the number of hospitals with this technology.

Deviation from definition: Data correspond to the number of hospitals with Radiation therapy equipment (rather than the number of machines).

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)


Reference period: 31st December.

Coverage:
- Number of digital Subtraction Angiography units (DSA units): mono + biplan.
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.
- Data correspond to the number of hospitals with this technology.

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

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)


Reference period: 31st December.

Coverage:
- Data on high-tech equipment in cabinets of ambulatory care providers are not available.
- Data correspond to the number of hospitals with this technology.
Deviatio

n from definition: Data correspond to the number of hospitals with lithotriptors (rather than the number of lithotriptors).

Bulgaria

Computed Tomography scanners

Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.
Coverage: The study is with annual periodicity. All types of health establishments except hospices are included.

Magnetic Resonance Imaging units

Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.
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.

Positron Emission Tomography scanners

Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.
Coverage: The study is with annual periodicity. All types of health establishments except hospices are included.

Gamma cameras

Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.
Coverage: The study is with annual periodicity. All types of health establishments except hospices are included.
Break in time series: 2009 data are not available.
Note: 2014: The increase of the number of these devices is related to the process of modernization of equipment of these health care facilities.

Mammographs

Source of data: National Centre for Public Health and Analyses at the Ministry of Health.
Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.  

**Reference period:** 31st of December.  

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

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**Radiation therapy equipment**

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

Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.  

**Reference period:** 31st of December.  

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

**Note:** 2014: The increase of the number of these devices is related to the process of modernization of equipment of these health care facilities.

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**Digital Subtraction Angiography units**

*Data collection discontinued in 2017 (reference year 2015)*

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

Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.  

**Reference period:** 31st of December.  

**Break in time series:** 2009 and 2010 data are not available.  

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

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**Lithotriptors**

*Data collection discontinued in 2017 (reference year 2015)*

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

Due to structural transformations in the health care system in 2011 the National Centre for Health Information was transform into National Centre for Public Health and Analyses.  

**Reference period:** 31st of December.  

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

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**Czechia**

**Computed Tomography scanners**

**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 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.
Magnetic Resonance Imaging units

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.

Positron Emission Tomography scanners

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:
- From the year 2000, data cover all sectors.

Gamma cameras

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:
- From the year 2000, data cover all sectors.

Mammographs

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 health sector covered. From the year 2000, data cover all sectors.
- Data under HP.1 encompass all bed care health establishments and HP.3 all other health establishments.
- From year 2014 data do not cover mammography machines in separate ambulatory gynaecology establishments (out of hospital).

Radiation therapy equipment

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 health sector covered. From the year 2000, data cover all sectors.
- Until 1999, data relate only to number of linear accelerators, Cobalt-60 units, Caesium-137 therapy units, circular accelerators (betatrons). Since 2000, data match the definition (Radioisotope irradiators AFL brachytherapeutic with LDR/MDR, Radioisotope irradiators AFL brachytherapeutic
with HDR and Radioisotope irradiators not specified also included). Break in time series: 2000.

**Digital Subtraction Angiography units**

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:
- From the year 2000, data covers all sectors.

**Lithotriptors**

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:

**Denmark**

**Computed Tomography scanners**

Source of data: Danish Health Authority, Radiation Protection. National database of radiation sources (for all years) Reference period: 31st of December. Coverage: All scanners including those integrated in PET/CT scanners and SPECT/CT scanners are included. PET/CT scanners and SPECT/CT scanners are also included under PET scanners and gamma cameras, respectively.

**Magnetic Resonance Imaging units**

Source of data: National Board of health, “The Scanner report”. Reference period: 31st of December. Coverage: The 2009 data have been provided by the Danish Regions.

**Positron Emission Tomography scanners**

Source of data: Danish Health Authority, Radiation Protection. Annual survey of nuclear medicine equipment. Reference period: 31st of December. Coverage: In 2004 some PET/CTs might have been registered as gamma cameras, which could be the reason for the large changes in numbers of gamma cameras and PET units from 2004 till 2005.

**Gamma cameras**

Source of data: Danish Health Authority, Radiation Protection. Annual survey of nuclear medicine
equipment.
Reference period: 31st of December.

**Mammographs**

*Source of data:* Danish Health Authority, Radiation Protection. National database of radiation sources (for all years).
Reference period: 31st of December.

**Radiation therapy equipment**

*Source of data:* Danish Health Authority, Radiation Protection. National database of radiation sources (for all years), except for brachytherapy, where data is from Annual survey of equipment with radioactive sources.
Reference period: 31st of December.
Break in time series: Data until 2007 for RAD units include only linear accelerators. From 2008, all types are included.

**Digital Subtraction Angiography units**

*Data collection discontinued in 2017 (reference year 2015)*
Data not available.

**Lithotriptors**

*Data collection discontinued in 2017 (reference year 2015)*
Data not available.

**Germany**

**Computed Tomography scanners**

**Stationary sector:**

Reference period: 31st December.

*Coverage:*
- Data on medical technology includes 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.


*Coverage:*
- Data comprise the number of computed Tomography scanners (CT) installed in the ambulatory sector.

**Magnetic Resonance Imaging units**
**Stationary sector:**
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](http://www.zvei.org).
Coverage:
- Data comprise the number of Magnetic Resonance Imaging units (MRI) installed in the ambulatory sector.

**Positron Emission Tomography scanners**
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).
- Additional equipment in the ambulatory sector is not counted in official statistics.

**Gamma cameras**
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).
- Additional equipment in the ambulatory sector is not counted in official statistics.
- Data before 2002 not available.

**Mammographs**
Data not available.

**Radiation therapy equipment**
Source of data: Federal Statistical Office, Hospital statistics 2017 (basic data of hospitals and...
prevention or rehabilitation facilities); Statistisches Bundesamt 2018, *Fachserie 12, Reihe 6.1.1*, table 2.8.1 and ibid, *Fachserie 12, Reihe 6.1.2*, table 2.6; [http://www.destatis.de](http://www.destatis.de) or [http://www.gbe-bund.de](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).
- Additional equipment in the ambulatory sector is not counted in official statistics.
- The figures comprise linear accelerators and Tele-Cobalt units.
- Caesium-137 therapy units, low to orthovoltage x-ray units, high dose and low dose rate brachytherapy units and conventional brachytherapy units are excluded.

**Digital Subtraction Angiography units**

*Data collection discontinued in 2017 (reference year 2015)*

Source of data: Federal Statistical Office, Hospital statistics (basic data of hospitals and prevention or rehabilitation facilities); Statistisches Bundesamt, *Fachserie 12, Reihe 6.1.1*, table 2.8.1 and ibid, *Fachserie 12, Reihe 6.1.2*, table 2.6; [http://www.destatis.de](http://www.destatis.de) or [http://www.gbe-bund.de](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).
- Additional equipment in the ambulatory sector is not counted in official statistics.
- Data before 2002 not available.

**Lithotriptors**

*Data collection discontinued in 2017 (reference year 2015)*

Source of data: Federal Statistical Office, Hospital statistics (basic data of hospitals and prevention or rehabilitation facilities); Statistisches Bundesamt, *Fachserie 12, Reihe 6.1.1*, table 2.8.1 and ibid, *Fachserie 12, Reihe 6.1.2*, table 2.6; [http://www.destatis.de](http://www.destatis.de) or [http://www.gbe-bund.de](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).
- Additional equipment in the ambulatory sector is not counted in official statistics.

**Estonia**

**Computed Tomography scanners**

*Source of data: National Institute for Health Development, Department of Health Statistics since 2008.*

Reference period: 31st of December.

Validity of the source:
- Valid since 2005.
- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of health care providers.
- The devices may also include combined devices like SPECT-CT, and it is possible that up to 2014 these devices are counted under both categories (i.e., under SPECT and CT units). The number of combined devices is not available. The first combined devices were purchased in 2007.
- From 2015 the combined devices SPECT-CT are counted only under Gamma cameras (SPECT) and PET-CT devices are counted under PET category only.

Coverage:
- All providers. Since 2006 data have been included in the annual statistical report “Health Care Provider”.
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.
- Break in time series: From 2015 the combined devices SPECT-CT are counted only under Gamma cameras (SPECT) and PET-CT devices are counted under PET category only.

Magnetic Resonance Imaging units

Reference period: 31st of December.
Validity of the source:
- Valid since 2005.
- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of health care providers.
- 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.

Coverage:
- All providers. Since 2006 data have been included in the annual reports (“Health Care Provider”).
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.

Positron Emission Tomography scanners

Reference period: 31st of December.
Validity of the source:
- Valid since 2005.
- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of health care providers.
- The devices may also include combined devices like PET-CT, and it is possible that up to 2014 these devices are counted under both categories (i.e., under PET and CT units). The number of combined devices is not available. The first combined devices were purchased in 2007.
- From 2015 the combined devices PET-CT and PET-MRI are counted under PET category only.

Coverage:
- All providers. Since 2006 data have been included in the annual reports (“Health Care Provider”).
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.

**Gamma cameras**

**Source of data:** National Institute for Health Development, Department of Health Statistics since 2008.

**Reference period:** 31st of December.

**Validity of the source:**
- Valid since 2005.
- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of health care providers.
- The devices may also include combined devices like SPECT-CT, and it is possible that up to 2014 these devices are counted under both categories (i.e., under SPECT and CT units). The number of combined devices is not available. The first combined devices were purchased in 2007. From 2015 the combined devices SPECT-CT are counted only under Gamma cameras (SPECT) category.

**Coverage:**
- All providers. Since 2006, data have been included in the annual reports (“Health Care Provider”).
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.

**Mammographs**

**Source of data:** National Institute for Health Development, Department of Health Statistics since 2008.

**Reference period:** 31st of December.

**Validity of the source:**
- Valid since 2013.
- Data on equipment were not collected routinely before 2013. Since 2013 data have been included in the annual reports of health care providers.

**Coverage:**
- All providers. Since 2013, data have been included in the annual reports (“Health Care Provider”).
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.

**Radiation therapy equipment**

**Source of data:** National Institute for Health Development, Department of Health Statistics since 2008.
Reference period: 31st of December.

Validity of the source:
- Valid since 2005.
- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of health care providers.

Coverage:
- All providers. Since 2006, data have been included in the annual reports (“Health Care Provider”).
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.

**Digital Subtraction Angiography units:**
*Data collection discontinued in 2017 (reference year 2015)*


Validity of the source:
- Valid since 2005.
- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of health care providers.

Reference period: 31st of December.

Coverage:
- All providers. Since 2006 data have been included in the annual reports (“Health Care Provider”).
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.

**Lithotriptors**
*Data collection discontinued in 2017 (reference year 2015)*


Validity of the source:
- Valid since 2005.
- Data on equipment were not collected routinely before 2005. Since 2006 data have been included in the annual reports of health care providers.

Reference period: 31st of December.

Coverage:
- All providers. Since 2006 data have been included in the annual reports (“Health Care Provider”).
- Devices rented from foreign firms are excluded, although the service is provided by Estonian health care providers.
- Data are collected from hospitals and ambulatory care providers. 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”.
Ireland

**Computed Tomography scanners**

*Source of data:* Environmental Protection Agency.
*Reference period:* End of each calendar year.
*Coverage:*
- All figures are taken from the EPA’s licensing database and were calculated at the end of each calendar year. Figures reflect the number of machines licensed by the EPA in Ireland. Under the licensing system used, the EPA assigns purposes to each item of equipment which indicates the clinical use of that item e.g. mammography, fluoroscopy, CT etc. This designation is based upon data supplied from equipment users. Therefore, the figures reflect how they describe the equipment.
- The figure for CT scanning units does not include PET/CT, SPEC/CT scanners or CT Scanners used for radiotherapy simulation (in addition to the figure quoted for CT units, there are seven CT scanners used for both CT and radiotherapy simulation, thirteen SPEC/CT units and six dedicated radiotherapy simulators).

**Magnetic Resonance Imaging units**

*Source of data:*
- From 2009: Irish Association of Physicists in Medicine.
- Up to 2008: Siemens, Ireland.

**Positron Emission Tomography scanners**

*Source of data:* Environmental Protection Agency.
*Reference period:* End of each calendar year.
*Coverage:*
- All figures are taken from the EPA’s licensing database and were calculated at the end of each calendar year. Figures reflect the number of machines licensed by the EPA in Ireland. Under the licensing system used, the EPA assigns purposes to each item of equipment which indicates the clinical use of that item e.g. mammography, fluoroscopy, CT etc. This designation is based upon data supplied from equipment users. Therefore, the figures reflect how they describe the equipment.

**Gamma cameras**

*Source of data:*
From 2017: National Clinical Head of Medical Devices, (HSE) for Public Hospitals, Department of Health for Private Hospitals.
*Pre 2017: Department of Health.*
*Reference period:* End of each calendar year.
*Coverage:* Refers to the number of Gamma cameras in the 21 Nuclear Medicine Departments in both public and private hospitals.

**Mammographs**

*Source of data:* Environmental Protection Agency.
*Reference period:* End of each calendar year.
*Coverage:*
- All figures are taken from the EPA’s licensing database and were calculated at the end of each calendar year. Figures reflect the number of machines licensed by the EPA in Ireland. Under the
licensing system used, the EPA assigns purposes to each item of equipment which indicates the clinical use of that item e.g. mammography, fluoroscopy, CT etc. This designation is based upon data supplied from equipment users. Therefore, the figures reflect how they describe the equipment.

**Radiation therapy equipment**

*Source of data:* Environmental Protection Agency.

*Reference period:* End of each calendar year.

*Coverage:*
- All figures are taken from the EPA’s licensing database and were calculated at the end of each calendar year. Figures reflect the number of machines licensed by the EPA in Ireland. Under the licensing system used, the EPA assigns purposes to each item of equipment which indicates the clinical use of that item e.g. mammography, fluoroscopy, CT etc. This designation is based upon data supplied from equipment users. Therefore, the figures reflect how they describe the equipment.
- For Radiation therapy equipment, the total figure is made up of 35 linear accelerators, one Cyberknife, five Ir-192 brachytherapy units, one X-ray brachytherapy unit and four low/ortho voltage units.

**Digital Subtraction Angiography units**

*Data collection discontinued in 2017 (reference year 2015)*

Data not available.

**Lithotriptors**

*Data collection discontinued in 2017 (reference year 2015)*

*Source of data:* Environmental Protection Agency.

*Reference period:* End of each calendar year.

*Coverage:*
- All figures are taken from the EPA’s licensing database and were calculated at the end of each calendar year. Figures reflect the number of machines licensed by the EPA in Ireland. Under the licensing system used, the EPA assigns purposes to each item of equipment which indicates the clinical use of that item e.g. mammography, fluoroscopy, CT etc. This designation is based upon data supplied from equipment users. Therefore, the figures reflect how they describe the equipment.
- The number of lithotripsy would be included in the number of fluoroscopy units. There is one licensee who supplies external mobile lithotripsy services to hospitals. Only six units are recorded as having a purpose of "lithotripsy". There may be other units in use but these may have other purposes assigned by the licensee.

**Greece**

**Computed Tomography scanners**

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

*Coverage:* Country Total.

**Magnetic Resonance Imaging units**

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

*Coverage:* Country Total.
Positron Emission Tomography scanners

Source of data: The Greek Atomic Energy Commission (for HP1+HP3) and the Hospital Census of ELSTAT (HP1).
Coverage: Country Total.

Gamma cameras

Source of data: The Greek Atomic Energy Commission (for HP1+HP3) and the Hospital Census of ELSTAT (HP1).
Coverage: Country Total.

Mammographs

Source of data: The Greek Atomic Energy Commission (for HP1+HP3) and the Hospital Census of ELSTAT (HP1).
Coverage: Country Total.

Radiation therapy equipment

Source of data: The Greek Atomic Energy Commission (for HP1+HP3) and the Hospital Census of ELSTAT (HP1).
Coverage: Country Total.

Digital Subtraction Angiography units

Source of data: Healthcare Technology Consultation Centre.
Coverage: The number of angiography units (120 in 2013) consists of 72 catheterization systems and 48 angiography systems.

Lithotriptors

Source of data: Healthcare Technology Consultation Centre

Spain

Computed Tomography scanners

- Since 2010: Ministry of Health, Social Services and Equity from Specialised Care Information System (Sistema de Información de Atención Especializada - SIAE).
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 health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.
- Change in data source.
- Information about medical technology and diagnostic activity for centers HP.3 included since 2010.

**Magnetic Resonance Imaging units**

Source of data:
- From 1992 to 2009: **Ministry of Health, Social Services and Equity** from National Catalogue of Hospitals (several issues).
  
- Since 2010: **Ministry of Health, Social Services and Equity** from **Specialised Care Information System** (Sistema de Información de Atención Especializada - SIAE).
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 health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.
- Change in data source.
- Information about medical technology and diagnostic activity for centers HP.3 included since 2010.

**Positron Emission Tomography scanners**

Source of data:
- Up to 2009: **Ministry of Health, Social Services and Equity** from National Catalogue of Hospitals (several issues).
  
- Since 2010: **Ministry of Health, Social Services and Equity** from **Specially Care Information System** (Sistema de Información de Atención Especializada - SIAE).
Reference period: 31st December.
Coverage:
- Until 2009, data relate only to devices available in hospitals; they do not include equipment in other health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.
Break in time series: 2010.
- Change in data source.
- Information about medical technology and diagnostic activity for centers HP.3 included since 2010.

**Gamma cameras**

Source of data:
- Up to 2009: **Ministry of Health, Social Services and Equity** from National Catalogue of Hospitals (several issues).
  
- Since 2010: **Ministry of Health, Social Services and Equity** from **Specialised Care Information System** (Sistema de Información de Atención Especializada - SIAE).
Reference period: 31st December.

Coverage:
- Until 2009, data relate only to devices available in hospitals; they do not include equipment in other health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.

Break in time series: 2010.
- Change in data source.
- Information about medical technology and diagnostic activity for centers HP.3 included since 2010.

**Mammographs**

Source of data:
- From 2006 to 2009: Ministry of Health, Social Services and Equity from National Catalogue of Hospitals (several issues).
- Since 2010: Ministry of Health, Social Services and Equity from Specialised Care Information System (Sistema de Información de Atención Especializada - SIAE).

Reference period: 31st December.

Coverage:
- Until 2009, data relate only to devices available in hospitals; they do not include equipment in other health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.

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

**Radiation therapy equipment**

Source of data:
- Since 2010: Ministry of Health, Social Services and Equity from Specialised Care Information System (Sistema de Información de Atención Especializada - SIAE).

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 health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.

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

**Digital Subtraction Angiography units:**

Data collection discontinued in 2017 (reference year 2015)
Source of data:
- Up to 2009: Ministry of Health, Social Services and Equity from National Catalogue of Hospitals (several issues).
- Since 2010: Ministry of Health, Social Services and Equity from Specialised Care Information System (Sistema de Información de Atención Especializada - SIAE).
Reference period: 31st December.
Coverage:
- Until 2009, data relate only to devices available in hospitals; they do not include equipment in other health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.
Break in time series: 2010.
- Change in data source.
- Information about medical technology and diagnostic activity for centers HP.3 included since 2010.

Lithotriptors:
Data collection discontinued in 2017 (reference year 2015)

Source of data:
- Since 2010: Ministry of Health, Social Services and Equity from Specialised Care Information System (Sistema de Información de Atención Especializada - SIAE).
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 health care facilities.
- Since 2010, data are available for equipment in hospitals and ambulatory sector.
- Change in data source.
- Information about medical technology and diagnostic activity for centers HP.3 included since 2010.

France

Computed Tomography scanners

Source of data: Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). 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: 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.

Magnetic Resonance Imaging units

Source of data: Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). 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: 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.

**Positron Emission Tomography scanners**

Source of data: Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). 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: 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.

**Gamma cameras**

Source of data: Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). 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: 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.

**Mammographs**

Source of data: Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). Data are from the “Statistique Annuelle des Établissements de santé (SAE)” from 2013 onwards.
Note: This survey has been recasted in 2014 for the data concerning 2013 onwards (review and update of the questionnaire, change of the unit surveyed [from legal entity to geographical establishment], improvement of the consistency between the survey and an administrative Source of data on the activity of hospitals). Though the principles of the survey remain the same, some concepts and some questions have changed. This led us to collect new data on Mammographs form 2013 onwards.
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).

**Radiation therapy equipment**

Source of data: Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). Data are from the “Statistique Annuelle des Établissements de santé (SAE)”.
Note: This survey has been recasted in 2014 for the data concerning 2013 onwards (review and update of the questionnaire, change of the unit surveyed [from legal entity to geographical establishment], improvement of the consistency between the survey and an administrative Source of data on the activity of hospitals). Though the principles of the survey remain the same, some concepts and some questions have changed: this can lead to break in series for the year 2013.
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: before the SAE survey was recasted, adding the number of hospitals equipped with accelerators or brachytherapy units could result in double counting, so it was tried to correct the double counting: the result of this work was considered as an estimation. Since 2013, the risk of double counting is very limited, that is why it was decided to add the two types of equipment, and to indicate a break in series.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)

Source of data: Ministère de la Santé et des Sports - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). Data are from FINESS until 2003 and from the “Statistique Annuelle des Établissements de santé (SAE)” from 2004 onwards.

Note: This survey has been recasted in 2014 for the data concerning 2013 onwards (review and update of the questionnaire, change of the unit surveyed [from legal entity to geographical establishment], improvement of the consistency between the survey and an administrative Source of data on the activity of hospitals). Though the principles of the survey remain the same, some concepts and some questions have changed: this can lead to break in series for the year 2013.

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 series: The first hypothesis to explain the break in series observed is a higher rate of non-response to this particular question for 2013. Perhaps is it due to the importance of the recast of the SAE survey, which demanded big efforts to the team in charge of filling the questionnaire in each hospital.

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)

Source of data: Ministère de la Santé et des Sports - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES). Data are from the “Statistique Annuelle des Établissements de santé (SAE)”.

Note: This survey has been recasted in 2014 for the data concerning 2013 onwards (review and update of the questionnaire, change of the unit surveyed [from legal entity to geographical establishment], improvement of the consistency between the survey and an administrative Source of data on the activity of hospitals). Though the principles of the survey remain the same, some concepts and some questions have changed: this can lead to break in series for the year 2013.

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: The first hypothesis to explain the break in series observed is a higher rate of non-response to this particular question for 2013. Perhaps is it due to the importance of the recast of the SAE survey, which demanded big efforts to the team in charge of filling the questionnaire in each hospital.

**Croatia**

**Computed Tomography scanners**

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

Reference period: 31st December.
Coverage: Data includes CT units in all public and private hospitals and other health care providers in Croatia, except prison hospital.

**Magnetic Resonance Imaging units**

Source of data: Croatian Institute of Public Health, Medical Equipment Database.
Reference period: 31st December.
Coverage: Data includes MRI units in all public and private hospitals and other health care providers in Croatia, except prison hospital.

**Positron Emission Tomography scanners**

Source of data: Croatian Institute of Public Health, Medical Equipment Database.
Reference period: 31st December.
Coverage: Data includes PET units in all public and private hospitals and other health care providers in Croatia, except prison hospital.

**Gamma cameras**

Source of data: Croatian Institute of Public Health, Medical Equipment Database.
Reference period: 31st December.
Coverage: Data includes Gamma cameras (including SPECT) and SPECT/CT in all public and private hospitals and other health care providers in Croatia, except prison hospital.

**Mammographs**

Source of data: Croatian Institute of Public Health, Medical Equipment Database.
Reference period: 31st December.
Coverage: Data includes CT Mammographs in all public and private hospitals and other health care providers in Croatia, except prison hospital.

**Radiation therapy equipment**

Source of data: Croatian Institute of Public Health, Medical Equipment Database.
Reference period: 31st December.
Coverage: Data includes Radiation therapy equipment in all public and private hospitals and other health care providers in Croatia, except prison hospital.
Deviation from the definition: Until 2012 included only linear accelerators and brachytherapy systems (Cobalt-60 units, Caesium-137 units and x-ray units were not included). Since 2013 includes also Cobalt-60 units, Caesium-137 units and x-ray units.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)

Source of data: Croatian Institute of Public Health, Medical Equipment Database
Reference period: 31st December
Coverage: Data includes DSA units in all public and private hospitals and other health care providers in Croatia, except prison hospital.

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)
Source of data: Croatian Institute of Public Health, Medical Equipment Database
Reference period: 31st December
Coverage: Data includes Lithotriptors in all public and private hospitals and other health care providers in Croatia, except prison hospital.

Italy

Computed Tomography scanners
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.

Magnetic Resonance Imaging units
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.

Positron Emission Tomography scanners
Reference period: 1st January.
Coverage:
- Data on DSA, PET and mammography units were available for the first time in 2007.
- Pet units include a modern PET-CT unit system that uses image fusion-superposition of CT and PET images.
- 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.

Gamma cameras
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.
Mammographs

Reference period: 1st January.
Coverage:
- Data on DSA, PET and mammography units were available for the first time in 2007.
- 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.

Radiation therapy equipment

Reference period: 1st January.
Coverage:
- For RAD units, only linear accelerator accounting is available.
- 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.

Digital Subtraction Angiography units

Data collection discontinued in 2017 (reference year 2015)

Reference period: 1st January.
Coverage:
- Data on DSA, PET and mammography units were available for the first time in 2007.
- 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.

Lithotriptors

Data collection discontinued in 2017 (reference year 2015)

Data not available.

Cyprus

Computed Tomography scanners

Source of data:
Up to 2004: Nicosia General Hospital, Medical Physics Department.
From 2005: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December.
**Magnetic Resonance Imaging units**

Source of data:
Up to 2004: Nicosia General Hospital, Medical Physics Department.
From 2005: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December.

**Positron Emission Tomography scanners**

Source of data:
Up to 2004: Nicosia General Hospital, Medical Physics Department.
From 2005: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December.

**Gamma cameras**

Source of data:
Up to 2004: Nicosia General Hospital, Medical Physics Department.
From 2005: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December.

**Mammographs**

Source of data: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December.

Estimation method:
- As regards years 2000-2004 the numbers are not actual, they have been estimated from the Department of Labour Inspection.
- Number of mammography equipment refers to number of dedicated mammography equipment (those designed exclusively for taking mammograms). The code is: CIM-9 87.37.

**Radiation therapy equipment**

Source of data:
Up to 2004: Nicosia General Hospital, Medical Physics Department.
From 2005: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)

Source of data:
Up to 2004: Nicosia General Hospital, Medical Physics Department.
From 2005: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December

**Lithotriptors**

Source of data:
Up to 2004: Nicosia General Hospital, Medical Physics Department.
From 2005: Ministry of Labour and Social Insurance, Department of Labour Inspection, Radiation Inspections and Control Service.
Reference period: 31st December

**Latvia**

**Computed Tomography scanners**

Source of data: Centre for Disease Prevention and Control; Statistical Report no.49 "About Diagnostic Radiology".
Reference period: 31st December.

**Magnetic Resonance Imaging units**

Source of data: Centre for Disease Prevention and Control; Statistical Report no.49 "About Diagnostic Radiology".
Reference period: 31st December.

**Positron Emission Tomography scanners**

Source of data: Centre for Disease Prevention and Control.
Reference period: 31st December.
Note: No PET scanner is available in Latvia.

**Gamma cameras**

Source of data: Centre for Disease Prevention and Control; Statistical Report no.49 "About Diagnostic Radiology".
Reference period: 31st December.

**Mammographs**

Source of data: Centre for Disease Prevention and Control; Statistical Report no.49 "About Diagnostic Radiology".
Reference period: 31st December.

**Radiation therapy equipment**

Source of data: Centre for Disease Prevention and Control; Statistical Report no.49 "About Diagnostic Radiology".
Reference period: 31st December.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)
**Source of data:** Centre for Disease Prevention and Control; Statistical Report no.49 "About Diagnostic Radiology".
Reference period: 31 December.

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)

**Source of data:** Centre for Disease Prevention and Control; Statistical Report no.49 "About Diagnostic Radiology".
Reference period: 31 December.

**Lithuania**

**Computed Tomography scanners**

Reference period: 31st December.
Coverage: The number of licensed equipment. Since 2007 – the number of functioning equipment.

**Magnetic Resonance Imaging units**

Reference period: 31st December.
Coverage: The number of functioning equipment.

**Positron Emission Tomography scanners**

Reference period: 31st December.
Coverage: The number of licensed equipment. Since 2007 – the number of functioning equipment.

**Gamma cameras**

Reference period: 31st December.
Coverage: The number of functioning equipment.

**Mammographs**

Reference period: 31st December.
Coverage: The number of licensed equipment. Since 2007 – the number of functioning equipment.

**Radiation therapy equipment**

Reference period: 31st December.
Coverage: The number of licensed equipment. Since 2007 – the number of functioning equipment.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)

Source of data: Radiation Protection Centre.
Reference period: 31st December.
Coverage: Since 2007 – the number of functioning equipment.
Deviation: The number includes digital and non-**Digital Subtraction Angiography units**.

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)

Source of data: Health Information Centre of Institute of Hygiene, data of entire annual survey of health establishments.
Reference period: 31st December
Coverage: The number of functioning equipment

**Luxembourg**

**Computed Tomography scanners**

Source of data: Direction de la Santé, Division de la Radioprotection.
Coverage: Includes all equipment in use.

**Magnetic Resonance Imaging units**

Source of data: Direction de la Santé, Division de la Radioprotection.
Coverage: Includes all equipment in use.

**Positron Emission Tomography scanners**

Source of data: Direction de la Santé, Division de la Radioprotection.
Coverage: Includes all equipment in use.

**Gamma cameras**

Source of data: Direction de la Santé, Division de la Radioprotection.
Coverage: Includes all equipment in use. Since 2015, there are 2 units with a CT-scanner on board.

**Mammographs**
Source of data: Direction de la Santé, Division de la Radioprotection. 
Coverage: Includes all equipment in use.

Radiation therapy equipment

Source of data: Direction de la Santé, Division de la Radioprotection. 
Coverage: Includes all equipment in use.

Digital Subtraction Angiography units
Data collection discontinued in 2017 (reference year 2015)

Source of data: Direction de la Santé, Division de la Radioprotection. 
Coverage: includes all equipment in use.

Lithotriptors
Data collection discontinued in 2017 (reference year 2015)

Source of data: Direction de la Santé, Division de la Radioprotection. 
Coverage: includes all equipment in use.

Hungary

Computed Tomography scanners

Source of data:
- Until 1999, Hungarian National Institute for Hospital and Medical Engineering (ORKI).
  http://www.oep.hu.
- From 2017: National Institute of Health Insurance Fund Management (NEAK, in Hungarian) 
  www.oep.hu.
Reference period: 31st December.
Coverage:
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health 
  institutes of the Hungarian State Railways are not included.
- The number contains only those CT scanners which are owned by health care institutions under 
  contract with the National Insurance Fund (OEP).

Magnetic Resonance Imaging units

Source of data:
- Until 1999, Hungarian National Institute for Hospital and Medical Engineering (ORKI).
  http://www.oep.hu.
- From 2017: National Institute of Health Insurance Fund Management (NEAK, in Hungarian) 
  www.oep.hu.
Reference period: 31st December.
Coverage:
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health 
  institutes of the Hungarian State Railways are not included.
- The number contains only those MRI units which are owned by health care institutions under 
  contract with the National Insurance Fund (OEP).
Positron Emission Tomography scanners

Source of data:
- From 2014: National Healthcare Services Center (ÁEEK in Hungarian) www.aeek.hu.

Reference period: 31st December.

Coverage:
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health institutes of the Hungarian State Railways are not included.
- The number contains only those units which are owned by health care institutions under contract with the National Insurance Fund (OEP).

Gamma cameras

Source of data:
- From 2014: National Healthcare Services Center (ÁEEK in Hungarian) www.aeek.hu.

Reference period: 31st December.

Coverage:
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health institutes of the Hungarian State Railways are not included.
- The number contains only those units which are owned by health care institutions under contract with the National Insurance Fund (OEP).
- In 2014 a new institution, the National Healthcare Service Center (ÁEEK), started collecting the data and unfortunately not all data providers answered its request. Hence the 2014 and 2015 numbers (respectively 62 and 64) – which are underestimated – are not reported in the database.

Mammographs

Source of data:
- From 2014: National Healthcare Services Center (ÁEEK in Hungarian) www.aeek.hu.

Reference period: 31st December.

Coverage:
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health
- The number contains only those units which are owned by health care institutions under contract with the National Insurance Fund (OEP).
- In 2014 a new institution, the National Healthcare Service Center (ÁEEK), started collecting the data and unfortunately not all data providers answered its request. Hence the 2014 and 2015 numbers (respectively 56 and 72) – which are underestimated – are not reported in the database.

**Radiation therapy equipment**

**Source of data:**
- From 2014: National Healthcare Services Center (ÁEEK in Hungarian) [www.aeek.hu](http://www.aeek.hu).

**Reference period:** 31st December.

**Coverage:**
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health institutes of the Hungarian State Railways are not included.
- The number contains only those units which are owned by health care institutions under contract with the National Insurance Fund (OEP).

**Digital Subtraction Angiography units**

*Data collection discontinued in 2017 (reference year 2015)*

**Source of data:**
- From 2014: National Healthcare Services Center (ÁEEK in Hungarian) [www.aeek.hu](http://www.aeek.hu).

**Reference period:** 31st December.

**Coverage:**
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health institutes of the Hungarian State Railways are not included.
- The number contains only those units which are owned by health care institutions under contract with the National Insurance Fund (OEP).

**Lithotriptors**

*Data collection discontinued in 2017 (reference year 2015)*

**Source of data:**
- From 2012 until 2013: National Institute for Quality- and Organizational Development in Healthcare and Medicines (GYEMSZI in Hungarian) [www.gyemszi.hu](http://www.gyemszi.hu)
- From 2014: National Healthcare Services Center (ÁEEK in Hungarian) [www.aeek.hu](http://www.aeek.hu)

Reference period: 31st December.

**Coverage:**
- Equipment used in military hospitals (belonging to the Ministry of Defence) and the health institutes of the Hungarian State Railways are not included.
- The number contains only those units which are owned by health care institutions under contract with the National Insurance Fund (OEP).

Break in time series: EMKI explains the large increase in 2008 as procurement of new equipment. This increase is also due to action that year that addressed the healthcare institutions one by one and called attention to their obligation to provide data. Due to deficient data provision by data providers it cannot be accurately determined to what extent the increase includes new pieces of equipment or old ones that are reported only now.

**Malta**

**Computed Tomography scanners**

**Source of data:**
- Aggregated data from **Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care** and **Occupational Health and Safety Authority** (OHSA)
- For data from 2008 onwards the data sources are the **Occupational Health & Safety Authority** (OHSA) and **Individual Institutions**.

**Reference period:** 31st December.

**Coverage:** The number of CT units decreased in 2011 due to the termination of one privately owned hospital.

2013: One CT scanner is mainly used for planning radiation therapy. A small private hospital was previously being considered as part of the ambulatory sector. This small private hospital is now being included under the hospital sector since it is licensed for overnight stays.

**Break in Series:** 2013: The number of CT scanners decreased since non-operational CT Scanners have been removed from the figures.

**Magnetic Resonance Imaging units**

**Source of data:**
- Aggregated data from **Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care** and **Occupational Health and Safety Authority** (OHSA)
- 2008 onwards: **Individual Institutions**.

**Reference period:** 31st December.

**Coverage:** The number of MRI units decreased in 2011 due to the termination of one privately owned hospital.

2013: The number of MRI units in the ambulatory sector have decreased since a small private hospital was previously being considered as part of the ambulatory sector. This small private hospital is now being included under the hospital sector since it is licensed for overnight stays.

**Positron Emission Tomography scanners**

**Source of data:**
- Aggregated data from **Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care** and **Occupational Health and Safety Authority** (OHSA)
For data from 2008 onwards the data sources are the Occupational Health & Safety Authority (OHSA) and Individual Institutions. Reference period: 31st December. 2013. Both PET scanners are a combined PET/CT scanner, which can also be used as CT scanners.

**Gamma cameras**

Source of data:
- Aggregated data from Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care and Occupational Health and Safety Authority (OHSA).
- For data from 2008 onwards the data sources are the Occupational Health & Safety Authority (OHSA) and Individual Institutions.
Reference period: 31st December.
Break in Series: 2013: The number of Gamma cameras decreased since non-operational Gamma cameras have been removed from the figures.

**Mammographs**

Source of data:
- Aggregated data from Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care and Occupational Health and Safety Authority (OHSA).
- For data from 2008 onwards the data sources are the Occupational Health & Safety Authority (OHSA) and Individual Institutions.
Reference period: 31st December.
Coverage: The number of Mammographs decreased in 2011 due to the termination of one privately owned hospital.
2013: A small private hospital was previously being considered as part of the ambulatory sector. This small private hospital is now being included under the hospital sector since it is licensed for overnight stays.
Break in Series: 2013: The number of Mammographs decreased since non-operational Mammographs have been removed from the figures.

**Radiation therapy equipment**

Source of data:
- Aggregated data from Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care and Occupational Health and Safety Authority (OHSA).
- For data from 2008 onwards the data sources are the Occupational Health & Safety Authority (OHSA) and Individual Institutions.
Reference period: 31st December.
Break in Series: 2013: The number of Radiation therapy equipment decreased since non-operational Radiation therapy equipment have been removed from the figures.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)

Source of data:
- Aggregated data from Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care and Occupational Health and Safety Authority (OHSA)
- For data from 2008 onwards the data sources are the Occupational Health & Safety Authority (OHSA) and Individual Institutions
Reference period: 31st December

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)

Source of data:
- Aggregated data from Individual Institutions, Directorate of Institutional Health, Ministry of Health, the Elderly and Community Care and Occupational Health and Safety Authority (OHSA)
- 2008 onwards: Individual Institutions

Reference period: 31st December

Coverage: 2007: Data on LSI units in HP.3 is not available.

**Netherlands**

**Computed Tomography scanners**

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.

**Magnetic Resonance Imaging units**

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.

**Positron Emission Tomography scanners**

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: *Jaarenquête Beeldvormende Diagnostiek* (annual survey imaging).

**Gamma cameras**

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.

**Mammographs**

Source of data: One-time survey.

**Radiation therapy equipment**

Source of data: Nationaal Ziekenhuis instituut; Ministry of Health, Welfare and Sports: Topklinische

**Digital Subtraction Angiography units:**
*Data collection discontinued in 2017 (reference year 2015)*

**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.

**Lithotriptors:**
*Data collection discontinued in 2017 (reference year 2015)*

**Source of data:** Annual reports social account which hospitals are required to deliver.

**Austria**

**Computed Tomography scanners**

**Source of data:** Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection / Gesundheit Österreich GmbH, Monitoring of medical technology development.

**Reference period:** 31st December.

**Coverage:**
- Included are all CT 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).

**Magnetic Resonance Imaging units**

**Source of data:** Austrian Federal Ministry of Labour, Social Affairs, Health 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).

**Positron Emission Tomography scanners**

**Source of data:** Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection / Gesundheit Österreich GmbH, Monitoring of medical technology development.

**Reference period:** 31st December.

**Coverage:**
- Included are all PET 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).

**Gamma cameras**

**Source of data:** Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection / Gesundheit Österreich GmbH, Monitoring of medical technology development.
Reference period: 31st December.
Coverage:
- Included are all **Gamma cameras** 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).

**Mammographs**

Reference period: 31st December.
Coverage: Included are screening units resp. at least one machine per screening unit utilized within the Austrian Breast Cancer Screening Program (which started in January 2014). These units have a particular certificate of quality. Although the majority of mammography machines is certified for the Breast Cancer Screening Program it has to be assumed, that some more machines are used outside of the framework of the screening program (e.g. for a second mammography in hospital after ambulant mammography).

**Radiation therapy equipment**

Reference period: 31st December.
Coverage:
- Included is all **Radiation therapy equipment** 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).

**Digital Subtraction Angiography units**: Data collection discontinued in 2017 (reference year 2015)

Source of data: Austrian Federal Ministry of Health & Gesundheit Österreich GmbH, Monitoring of medical technology development (Großgeräteerhebung).
Reference period: 31st December.
Coverage: Complete (as far as information is available regarding the ambulatory sector).
Estimation method: From 2006 onwards, data for DSA units are a perpetuation of 2005, because these data are not collected any more.

**Lithotriptors**: Data collection discontinued in 2017 (reference year 2015)

Source of data: Austrian Federal Ministry of Health & Gesundheit Österreich GmbH, Monitoring of medical technology development (Großgeräteerhebung).
Reference period: 31st December.
Coverage: Complete (as far as information is available regarding the ambulatory sector).
Estimation method: From 2006 on, data for LSI units are a perpetuation of 2005, because these data are not collected any more.

**Poland**
Computed Tomography scanners

Source of data:
In year 2013 and earlier:
Ministry of Health:
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:
Ministry of Health:
- 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.
Break in time series:
- 2014: change in data source as described above.

Magnetic Resonance Imaging units

Source of data:
In year 2013 and earlier:
Ministry of Health:
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:
Ministry of Health:
- 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.
Break in time series:
- 2014: change in data source as described above.

Positron Emission Tomography scanners

Source of data:
In year 2013 and earlier:
Ministry of Health:
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:

Ministry of Health:
- 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.

Break in time series:
- 2014: change in data source as described above.

**Gamma cameras**

Source of data:

In year 2013 and earlier:

Ministry of Health:
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:

Ministry of Health:
- 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.

Break in time series:
- 2014: change in data source as described above.

**Mammographs**

Source of data:

In year 2013 and earlier:

Ministry of Health:
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:

Ministry of Health:
- 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.
Break in time series:
- 2014: change in data source as described above.

**Radiation therapy equipment**

Source of data:
*In year 2013:*

**Ministry of Health:**
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:*

**Ministry of Health:**
- 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.

Break in time series:
- 2014: change in data source as described above.
- 2017: Data from Ministry of Health - Radiation therapy equipment have changed (from cobalt-60 and caesium-137 to linear accelerator).

**Digital Subtraction Angiography units:**

*Data collection discontinued in 2017 (reference year 2015)*

Source of data:
*In year 2013 and earlier:*
Ministry of Health:
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:*
Ministry of Health:
- 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.

Break in time series:
- 2014: change in data source as described above.

**Lithotriptors:**


Source of data:
In year 2013 and earlier:
Ministry of Health:
- MZ-12 - report on activity and workers in outpatient specialised health care. 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 2014:
Ministry of Health:
- 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.
Break in time series:
- 2014: change in data source as described above.

Portugal

Computed Tomography scanners

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.

Magnetic Resonance Imaging units

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.

Positron Emission Tomography scanners

Source of data:
- For all sectors (inpatient and outpatient facilities) of public hospitals in the mainland: Ministry of Health - Survey of High-tech Facilities.
Coverage:
- Data include the total installed equipment.

Gamma cameras
Source of data:
- For all sectors (inpatient and outpatient facilities) of public hospitals in the mainland: Ministry of Health - Survey of High-tech Facilities.
Coverage:
- Data include the total installed equipment.

Mammographs

Source of data:
- For all sectors (inpatient and outpatient facilities) of public hospitals in the mainland: Ministry of Health - Survey of High-tech Facilities.
Coverage:
- Data include the total installed equipment.

Radiation therapy equipment

Source of data:
- For all sectors (inpatient and outpatient facilities) of public hospitals in the mainland: Ministry of Health - Survey of High-tech Facilities.
Coverage:
- Data include the total installed equipment.

Digital Subtraction Angiography units:
Data collection discontinued in 2017 (reference year 2015)

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 includes the total installed equipment.

Lithotriptors:
Data collection discontinued in 2017 (reference year 2015)

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 includes the total installed equipment.

Romania

Computed Tomography scanners:

Source of data: National Institute of Statistics, Activity of Sanitary Units – 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). The number of Single Photon Emission Computed Tomography (SPECT) included in the number of Computed Tomography scanners couldn’t be identified.
**Magnetic Resonance Imaging units:**

*Source of data:* National Institute of Statistics, Activity of Sanitary Units – 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).

**Positron Emission Tomography scanners:**

*Source of data:* National Institute of Statistics, Activity of Sanitary Units – 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).

**Gamma cameras:**

*Source of data:* National Institute of Statistics, Activity of Sanitary Units – 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).

**Mammographs**

*Source of data:* National Institute of Statistics, Activity of Sanitary Units – annual survey performed by NIS.
*Reference period:* data as of 31st December.
*Coverage:* All hospitals and ambulatory care units from public sector. The indicator for mammographs was included in data collection starting with 2008.

**Radiation therapy equipment**

*Source of data:* National Institute of Statistics, Activity of Sanitary Units – annual survey performed by INS.
*Reference period:* data as of 31st December.
*Coverage:* For 2006 year the data covers all hospitals from public sector, starting with 2007 data was collected also for ambulatory sector and refers to hospitals and ambulatory care units of public and private sector.

**Digital Subtraction Angiography units:**

*Source of data:* National Institute of Statistics, Activity of Sanitary Units – annual survey performed by NIS.
*Reference period:* data as of 31st December.

**Lithotriptors:**

*Source of data:* National Institute of Statistics, Activity of Sanitary Units – annual survey performed by NIS.
*Reference period:* data as of 31st December.
*Coverage:* For 2006 year the data covers all hospitals from public sector, starting with 2007 data refers to hospitals and ambulatory care units of public and private sector. For 2007 ambulatory sector did not report any data for Lithotriptors.

**Slovenia**

**Computed Tomography scanners**

*Source of data:* Slovenian Radiation Protection Administration, Registry of radiation sources in medicine and veterinary medicine.
*Reference period:* 31st December.
*Coverage:* Refers to all institutions in Slovenia.

**Magnetic Resonance Imaging units**

*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.

**Positron Emission Tomography scanners**

*Source of data:* Slovenian Radiation Protection Administration, registry of radiation sources in medicine and veterinary medicine.
*Reference period:* 31st December.
*Coverage:* Refers to all institutions in Slovenia.
- Number of Positron Emission Tomography scanner units (PET units): Gamma camera that enables a limited PET diagnosis.

**Gamma cameras**

*Source of data:* Slovenian Radiation Protection Administration, registry of radiation sources in medicine and veterinary medicine.
*Reference period:* 31st December.
*Coverage:* Refers to all institutions in Slovenia.

**Mammographs**

*Source of data:* Slovenian Radiation Protection Administration, registry of radiation sources in medicine and veterinary medicine.
Reference period: 31\textsuperscript{st} December.

**Coverage:** Refers to all institutions in Slovenia.

**Radiation therapy equipment**

**Source of data:** Slovenian Radiation Protection Administration, registry of radiation sources in medicine and veterinary medicine.

Reference period: 31\textsuperscript{st} December.

**Coverage:** Refers to all institutions in Slovenia.

- Number of units of Radiation therapy equipment (RAD units): four accelerators, two Co-60 radiotherapy units, two low energy x-ray units and one brachytherapy unit.

**Digital Subtraction Angiography units**

*Data collection discontinued in 2017 (reference year 2015)*

Source of data: Slovenian Radiation Protection Administration, registry of radiation sources in medicine and veterinary medicine

Reference period: 31\textsuperscript{st} December.

**Coverage:** Refers to all institutions in Slovenia.

- Number of Digital Subtraction Angiography units (DSA units) refers to all angiographic systems

**Lithotriptors**

*Data collection discontinued in 2017 (reference year 2015)*

Source of data: Slovenian Radiation Protection Administration, registry of radiation sources in medicine and veterinary medicine.

Reference period: 31\textsuperscript{st} December.

**Coverage:** Refers to all institutions in Slovenia.

**Slovakia**

**Computed Tomography scanners**

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

- A revision of data within the register of medical technology was made in SR in 2004; therefore, data for CT scanners, radiation therapy units and Lithotriptors were submitted only from 2003. Data for CT scanners, radiation therapy units and Lithotriptors up to the year 2003 are inconsistent, and their numbers were not submitted for the table “Medical technology available in HP1 + HP3 together”.

Reference period: 31\textsuperscript{st} December.

**Coverage:** Medical technologies available regardless of frequency of use.

**Note:** 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.

**Magnetic Resonance Imaging units**

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

Reference period: 31\textsuperscript{st} December.

**Coverage:** Medical technologies available regardless of frequency of use.

**Note:** 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.

**Positron Emission Tomography scanners**

*Source of data:* National Health Information Center.  
*Reference period:* 31st December.  
*Coverage:* Medical technologies available regardless of frequency of use.

**Gamma cameras**

*Source of data:* National Health Information Center.  
*Reference period:* 31st December.  
*Coverage:* Medical technologies available regardless of frequency of use.

**Mammographs**

*Source of data:* National Health Information Center.  
*Reference period:* 31st December.  
*Coverage:* Medical technologies available regardless of frequency of use.  
- Data for Mammographs up to the year 2003 are inconsistent, and their numbers were not submitted.

*Note:* 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.

**Radiation therapy equipment**

*Source of data:* National Health Information Center.  
- A revision of data within the register of medical technology was made in SR in 2004; therefore, data for CT scanners, radiation therapy units and Lithotriptors were submitted only from 2003. Data for CT scanners, radiation therapy units and Lithotriptors up to the year 2003 are inconsistent, and their numbers were not submitted for the table “Medical technology available in HP1 + HP3 together”.  
*Reference period:* 31st December.  
*Coverage:* Medical technologies available regardless of frequency of use.

**Digital Subtraction Angiography units**

*Source of data:* National Health Information Center.  
*Reference period:* 31st December.  
*Coverage:* Medical technologies available regardless of frequency of use.

**Lithotriptors**

*Source of data:* National Health Information Center.  
- A revision of data within the register of medical technology was made in SR in 2004; therefore, data for CT scanners, radiation therapy units and Lithotriptors were submitted only from 2003. Data for CT scanners, radiation therapy units and Lithotriptors up to the year 2003 are inconsistent, and their numbers were not submitted for the table “Medical technology available in HP1 + HP3 together”.

*Data collection discontinued in 2017 (reference year 2015)*
Reference period: 31st December.
Coverage: Medical technologies available regardless of frequency of use.

Finland

**Computed Tomography scanners**

Source of data: Radiation and Nuclear Safety Authority Finland.
Coverage: All hospitals.

**Magnetic Resonance Imaging units**

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

**Positron Emission Tomography scanners**

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

**Gamma cameras**

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

**Mammographs**

Source of data: Radiation and Nuclear Safety Authority Finland.
Coverage: All hospitals.

**Radiation therapy equipment**

Source of data: Radiation and Nuclear Safety Authority.
Coverage: All hospitals.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)

Source of data: Radiation and Nuclear Safety Authority Finland.
Coverage: All hospitals. Until 2014, the number of all fixed installations for angiography and cardioangiography equipment has been used (currently the number is 110). Since 2015, the number includes only a number of DSA equipment (per instructions) without noting that one can perform DSA as well with some of the angiography or cardioangiography equipment.

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)

Source of data: Radiation and Nuclear Safety Authority Finland.
Coverage: All hospitals.
Sweden

**Computed Tomography scanners**

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils), Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.

Reference period:
- 2015 December.
- 2016 December.
- 2017 December.

Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

**Magnetic Resonance Imaging units**

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils), Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.

Reference period:
- 2015 December.
- 2016 December.
- 2017 December.

Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

**Positron Emission Tomography scanners**

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils), Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.

Reference period:
- 2015 December.
- 2016 December.
- 2017 December.

Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

**Gamma cameras**

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils), Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.

Reference period:
- 2015 December.
- 2016 December.
- 2017 December.
Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

Mammographs

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils),
Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.
Reference period:
- 2015 December.
- 2016 December.
- 2017 December.
Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

Radiation therapy equipment

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils),
Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.
Reference period:
- 2015 December.
- 2016 December.
- 2017 December.
Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

Digital Subtraction Angiography units
Data collection discontinued in 2017 (reference year 2015)

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils),
Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.
Reference period:
- 2015 December.
- 2016 December.
Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

Lithotriptors
Data collection discontinued in 2017 (reference year 2015)

Source of data:
Swedish Association of Local Authorities and Regions (earlier Federation of Swedish County Councils),
Statistics collected from local authorities by Swedish Association of Local Authorities and Regions.
Reference period:
- 2015 December.
- 2016 December.
Coverage:
- Most of the health care givers from local regions are included. Some private health care givers may be excluded.

Iceland

Computed Tomography scanners


Magnetic Resonance Imaging units


Positron Emission Tomography scanners


Gamma cameras


Mammographs


Radiation therapy equipment


Digital Subtraction Angiography units

Data collection discontinued in 2017 (reference year 2015)


Lithotriptors

Data collection discontinued in 2017 (reference year 2015)

Liechtenstein

**Computed Tomography scanners**

Source of data: data report from hospitals.

**Magnetic Resonance Imaging units**

Source of data: data report from hospitals.  
Coverage: 100%.

**Positron Emission Tomography scanners**

Source of data: data report from hospitals.  
Coverage: 100%.

**Gamma cameras**

Source of data: data report from hospitals.  
Coverage: 100%.

**Mammographs**

Source of data: data report from hospital.

**Radiation therapy equipment**

Source of data: data report from hospital.  
Coverage: 100%.

**Digital Subtraction Angiography units**

Data collection discontinued in 2017 (reference year 2015)

Source of data: data report from hospitals.  
Coverage: 100%.

**Lithotriptors**

Data collection discontinued in 2017 (reference year 2015)

Source of data: data report from hospitals.

Norway

**Computed Tomography scanners**

Data not available.

**Magnetic Resonance Imaging units**

Data not available.

**Positron Emission Tomography scanners**
Data not available.

**Gamma cameras**
Data not available.

**Mammographs**
Data not available.

**Radiation therapy equipment**
Data not available.

**Digital Subtraction Angiography units**
Data collection discontinued in 2017 (reference year 2015)
Data not available.

**Lithotriptors**
Data collection discontinued in 2017 (reference year 2015)
Data not available.

**Switzerland**

**Computed Tomography scanners**:

Coverage:
- Full administrative data from the Federal Office of Public Health, Bern, Division of Radiological Protection.
- Since 2007, the data represent the number of apparatuses in use.
Deviation from the definition: 1997-2006 and 2015 in hospitals (HP.1) only; the data represent the number of hospitals running at least one unit.
Estimation method: Time series are not complete. Some data are available at irregular dates. To estimate data with consistent time periods, interpolation is therefore used on punctual data from permanent administrative registers.
Break in time series: New data since 2007. CT non-human health have been excluded since 2010. For HP.1: Hospital statistics have been revised (data year 2010); new counting of all equipment.

**Magnetic Resonance Imaging units**

Coverage: Hospitals (HP.1).
Deviation from the definition: 1997-2006 and 2010-2015 in hospitals (HP.1) only; the data represent the number of hospitals running at least one unit.
Break in time series: Hospital statistics have been revised (data year 2010); new counting of all equipment.

**Positron Emission Tomography scanners**


**Gamma cameras**
Deviation from the definition: Number of health care providers with a valid permit to run Gamma cameras; it is assumed that hospitals have more than one gamma camera but the total number of units is unknown.

**Digital Subtraction Angiography units:**

Estimation method: Interpolation on punctual data from a permanent administrative register.

**Mammographs:**

Estimation method: Time series are not complete. Some data are available at irregular dates. To estimate data with consistent time periods, interpolation is therefore operated on punctual data from permanent administrative registers.

**Radiation therapy equipment**

*Data collection discontinued in 2017 (reference year 2015)*

Coverage:
- Full administrative data from the Federal Office of Public Health, Bern, Division of Radiological Protection.
- Since 2007, the data represent the number of apparatuses in use.
Deviation from the definition: 1997 - 2006 in Hospitals (HP.1) only: the data represent the number of hospitals running at least one unit.
Estimation method: Time series are not complete. Some data are available at irregular dates. To estimate data with consistent time periods, interpolation is therefore operated on punctual data from permanent administrative registers.
Break in time series:
- New data on HP1 since 2010 from FSO Federal Statistical Office, Neuchâtel, hospital statistics; yearly census.

**Lithotriptors**

*Data collection discontinued in 2017 (reference year 2015)*

Coverage: Hospitals (HP.1).
Deviation from the definition: 1997-2006 in Hospitals (HP.1) only: the data represent the number of hospitals running at least one unit.
Break in time series: Hospital Statistics has been revised (data year 2010); new counting of all equipment.
Montenegro

**Computed Tomography scanners**
Data not available.

**Magnetic Resonance Imaging units**
Data not available.

**Positron Emission Tomography scanners**
Data not available.

**Gamma cameras**
Data not available.

**Mammographs**
Data not available.

**Radiation therapy equipment**
Data not available.

**Digital Subtraction Angiography units**
*Data collection discontinued in 2017 (reference year 2015)*
Data not available.

**Lithotriptors**
*Data collection discontinued in 2017 (reference year 2015)*
Data not available.

North Macedonia

**Computed Tomography scanners**

*Source of data: Ministry of Health.*
*Reference period: 31st December.*
*Coverage: Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.*

**Magnetic Resonance Imaging units**

*Source of data: Ministry of Health.*
*Reference period: 31st December.*
*Coverage: Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.*

**Positron Emission Tomography scanners**

*Source of data: Ministry of Health.*
*Reference period: 31st December.*
*Coverage: Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.*
**Gamma cameras**

*Source of data:* Ministry of health.
*Reference period:* 31st December.
*Coverage:* Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.

**Mammographs**

*Source of data:* Ministry of health.
*Reference period:* 31st December.
*Coverage:* Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.

**Radiation therapy equipment**

*Source of data:* Ministry of health.
*Reference period:* 31st December.
*Coverage:* Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.

**Digital Subtraction Angiography units**

*Source of data:* Ministry of health.
*Reference period:* 31st December.
*Coverage:* Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.

**Lithotriptors**

*Source of data:* Ministry of health.
*Reference period:* 31st December.
*Coverage:* Data include only equipment from publicly owned hospitals and ambulatory sector, private sector is excluded.

**Albania**

**Computed Tomography scanners**
Data not available.

**Magnetic Resonance Imaging units**
Data not available.

**Positron Emission Tomography scanners**
Data not available.

**Gamma cameras**
Data not available.
Mammographs
Data not available.

Radiation therapy equipment
Data not available.

Digital Subtraction Angiography units
Data collection discontinued in 2017 (reference year 2015)
Data not available.

Lithotriptors
Data collection discontinued in 2017 (reference year 2015)
Data not available.

Serbia

Computed Tomography scanners
Reference period: 31st of December.
Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Magnetic Resonance Imaging units
Reference period: 31st of December.
Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Positron Emission Tomography scanners
Reference period: 31st of December.
Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Gamma cameras
Reference period: 31st of December.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Mammographs


Reference period: 31st of December.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Radiation therapy equipment


Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Digital Subtraction Angiography units

Data collection discontinued in 2017 (reference year 2015)


Reference period: 31st of December.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Lithotriptors

Data collection discontinued in 2017 (reference year 2015)


Reference period: 31st of December.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Turkey

Computed Tomography scanners
Source of data: General Directorate for Health Services, Ministry of Health.

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 Turkey.

Magnetic Resonance Imaging units

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

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 Turkey.

Positron Emission Tomography scanners

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

Coverage:
- Data cover the number of devices in the MoH, university hospitals, private and other sector (other public establishments, local administrations and since 2012 MoND-affiliated facilities) in addition to those used by outsourcing in Turkey.

Note: The strong increase in 2012 is mainly due to improvements in data reporting and not to a real increase in the capacity.

Gamma cameras

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

Coverage:
- Data cover the number of devices in the MoH, university hospitals, private and other sector (other public establishments, local administrations and MoND-affiliated facilities) in addition to those used by outsourcing in Turkey.

Note: The strong increase in 2012 is mainly due to improvements in data reporting and not to a real increase in the capacity.

Mammographs

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

Coverage:
- Data cover the number of devices in the MoH, university hospitals, private and other sector (other public establishments, local administrations and MoND-affiliated facilities) in addition to those used by outsourcing in Turkey.

Note: The strong increase in 2012 is mainly due to improvements in data reporting and not to a real increase in the capacity.

Radiation therapy equipment

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

Coverage:
- Data cover the number of devices in the MoH, university hospitals, private and other sector (other public establishments, local administrations and MoND-affiliated facilities) in addition to those used by outsourcing in Turkey.
Linear accelerators, Cobalt-60 units and brachytherapy units are included in Radiation therapy equipment.

Digital Subtraction Angiography units:
Data collection discontinued in 2017 (reference year 2015)

Source of data: General Directorate for Health Services, Ministry of Health.
Coverage:
- Data cover the number of devices in the MoH, university hospitals, private and other sector (other public establishments, local administrations and MoND-affiliated facilities) in addition to those used by outsourcing in Turkey.

Lithotriptors
Data collection discontinued in 2017 (reference year 2015)

Source of data: General Directorate Health Services, Ministry of Health.
Coverage:
- Data cover the number of devices in the MoH, university hospitals private and other sector (other public establishments, local administrations and MoND-affiliated facilities) in addition to those used by outsourcing in Turkey.

United Kingdom

Computed Tomography scanners

Source of data:
- Wales: Welsh Health Estates.

Coverage:
- Does not include private sector.
- Wales - Excludes CT Scanners used for radiation therapy planning purposes (CT Sims) and Hybrid imaging systems eg Ct-Gamma cameras.

Estimation method:
- 2000 to 2001 and 2008: Only available data was for England. UK figure estimated 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 onwards.

Magnetic Resonance Imaging units

Source of data:
- Wales: Welsh Health Estates.
- **Northern Ireland**: Social Services and Public Safety (for 2004 and 2005 data).

  **Coverage**:
  - Does not include private sector.

  **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 onwards.

**Positron Emission Tomography scanners**

**Source of data**:
- Royal College of Radiologists ([http://www.rcr.ac.uk/Publications.aspx?pageid=310&PublicationID=214](http://www.rcr.ac.uk/Publications.aspx?pageid=310&PublicationID=214)).

  **Coverage**: UK, NHS and Private.
  - Since 2006, no England data available so a UK level estimate not created.

**Gamma cameras**


**Mammographs**

**Source of data**: NHS Cancer Screening Programme taken from the NCCPM equipment reports.

No source available from 2012 onwards.


**Coverage**:
- Mammography sets in use in the NHS Screening Programme. They cannot be used for anything other than mammography, but could be used for either screening mammography or for investigation of symptoms. There are other machines used only for investigations of symptoms, but their number is not known. Does not include those machines used for private mammography.

**Break in time series**: 2010. Pre-2010 is England only. 2010 onwards is based on a UK estimate.

**Radiation therapy equipment**

**Source of data**:
- **Wales**: Welsh Health Estates.

**Coverage**:  
- Does not include private sector.
- 2010, 2011 and 2014 figures only include Linacs.

**Estimation method**:  
- Raw numbers for England and Wales have been increased pro-rata by the OECD Secretariat to provide appropriate numbers for the UK, enabling the correct computation of rates using the UK population data stored within the database.
- 2017 data: At the time of calculation, the 2017 population data was not available. Therefore, the UK level estimation has been calculated using the 2016 population data.

**Break in time series**: 2016. Change in data collection methodology. Since 2016, data include Brachytherapy Treatment Machines, Kilovoltage Treatment Machines and Other Treatment Machines (Cyberknife, GammaKnife and Adrienne Systems) in addition to Linacs.

**Digital Subtraction Angiography units**:  
*Data collection discontinued in 2017 (reference year 2015)*


**Coverage**:  
- England and Wales.
- 2007/2008 comprises 54 in England, two in Wales, one in London Chest Hospital.
- 2007 onwards – no England data available so a UK level estimate not created.

**Estimation method**: Raw numbers of angiography units for 2006-2007 have been increased pro-rata by the OECD Secretariat to provide appropriate numbers for the UK, enabling the correct computation of rates using the UK population data stored within the database.

**Lithotriptors**:  
*Data collection discontinued in 2017 (reference year 2015)*

Data not available.