

OECD Health Statistics 2021

Definitions, Sources and Methods

Physicians by categories

Three main categories and eight sub-categories selected for the common module:

Generalist medical practitioners (ISCO-08 code: 2211)

- General practitioners
- Other generalist (non-specialist) medical practitioners

Specialist medical practitioners (ISCO-08 code: 2212)

- General paediatricians
- Obstetricians and gynaecologists
- Psychiatrists
- Medical group of specialists
- Surgical group of specialists
- Other specialists not elsewhere classified

Medical doctors not further defined (ISCO-08 code: 2210)

The [breakdown by categories](#) should be provided for [practising physicians](#) where possible. (If not possible, the data can be reported for professionally active physicians or physicians licensed to practise).

Notes:

- The following criteria are proposed in order to avoid double counting of doctors who have more than one specialty: 1) the predominant (main) area of practice of doctors; or 2) the last specialty for which doctors have received registration.
- The number should be at the end of the calendar year.

Generalist medical practitioners (ISCO-08 code: 2211)

[Generalist medical practitioners](#) do not limit their practice to certain disease categories or methods of treatment, and may assume responsibility for the provision of continuing and comprehensive medical care to individuals, families and communities.

Inclusion

- General practitioners
- District medical doctors - therapists
- Family medical practitioners
- Primary health care physicians
- Medical doctors (general)
- Medical officers (general)
- Medical interns or residents specialising in general practice or without any area of specialisation yet

Exclusion

- Paediatricians
- Obstetricians and gynaecologists
- Specialist physicians (internal medicine)

- Psychiatrists
- Clinical officers
- Feldschers

Note: Medical interns and residents who have completed a basic medical university education and are undertaking postgraduate clinical training are included here, if they are specialising in general practice or if they have not chosen their area of specialisation yet. Although in some countries 'general practice' and 'family medicine' may be considered as medical specialisations, these occupations should always be classified here.

General practitioners

General practitioners (or “family doctors”) assume responsibility for the provision of continuing and comprehensive medical care to individuals, families and communities.

Inclusion

- General practitioners
- District medical doctors - therapists
- Family medical practitioners (“family doctors”)
- Medical interns or residents specialising in general practice

Exclusion

- Paediatricians
- Other generalist (non-specialist) medical practitioners

Notes:

- Although in some countries ‘general practice’ and ‘family medicine’ may be considered as medical specialisations, these occupations should always be classified here.
- Offices of general medical practitioners (HP.3.1.1 in SHA 2011) include establishments of doctors who hold a degree in medicine and are primarily engaged in the independent practice of general medicine.

Other generalist (non-specialist) medical practitioners

Other generalist medical practitioners do not limit their practice to certain disease categories or methods of treatment. They do not work in an area of specialisation.

Inclusion

- Generalists not included in general practitioners
- Generalist/non-specialist practitioners working in hospital or in other settings
- Medical interns or residents without any area of specialisation yet

Exclusion

- General practitioners (“family doctors”)
- Paediatricians
- Occupational medicine physicians

Specialist medical practitioners (ISCO-08 code: 2212)

Specialist medical practitioners diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments in humans, using specialised testing, diagnostic, medical, surgical, physical and psychiatric techniques, through application of the principles and procedures of modern medicine. They specialise in certain disease categories, types of patient or methods of treatment and may conduct medical education and research in their chosen areas of specialisation.

Inclusion

- Paediatricians
- Obstetricians and gynaecologists
- Psychiatrists
- Medical specialists
- Surgical specialists
- Medical interns or residents training for a specialty

Exclusion

- General practitioners
- Dental practitioners
- Dental surgeons
- Oral and maxillofacial surgeons

Note: Medical interns and residents training as specialist practitioners (except general practice) are included here. Although in some countries 'stomatology' may be considered as a medical specialisation, stomatologists should be included in dentists.

General paediatricians

Paediatricians deal with the development, care, and diseases of children.

Inclusion

- Medical interns or residents specialising in paediatrics

Exclusion

- Paediatric specialties (e.g. child psychiatry, child/paediatric surgery, child/paediatric gynaecology, paediatric cardiology, paediatric oncology, etc.)

Obstetricians and gynaecologists

Obstetricians specialise in pregnancy and childbirth. **Gynaecologists** are concerned with the functions and diseases specific to women and girls, especially those affecting the reproductive system.

Inclusion

- Child/paediatric gynaecology
- Reproduction medicine
- Genetics
- Medical interns or residents specialising in obstetrics and gynaecology

Psychiatrists

Psychiatrists are medical doctors who specialise in the prevention, diagnosis and treatment of mental illness. They have post-graduate training in psychiatry and may also have additional training in a psychiatric specialty.

Inclusion

- Psychiatry
- Neuropsychiatry
- Adult and geronto-psychiatry
- Child psychiatry
- Psychiatry - addictive disorders / diseases
- Social psychiatry

- Psychiatric rehabilitation
- Medical interns or residents training in these psychiatric specialties

Exclusion

- Psychologists

Medical group of specialists

Medical specialists are doctors who specialise in the diagnosis and non-surgical treatment of physical disorders and diseases.

Inclusion

- Internal medicine
- Cardiology
- Endocrinology
- Gastroenterology
- Pulmonology
- Respiratory medicine
- Oncology
- Gynaecologic oncology
- Immunology
- Rheumatology
- Neurology
- Oto-rhino-laryngology
- Radiology
- Infectious diseases
- Microbiology-bacteriology
- Haematology
- Dermatology
- Pathology
- Occupational medicine, Community medicine (including hygiene, epidemiology and assessment medicine)
- Medical interns or residents training in these specialties

Exclusion

- Surgery
- Gynecology and obstetrics
- Paediatrics
- Psychiatry
- General practice

Surgical group of specialists

Surgical specialists are doctors who specialise in the use of surgical techniques to treat disorders and diseases.

Inclusion

- General surgery
- Neurological surgery
- Plastic surgery
- Orthopaedics
- Ophthalmology
- Urology, nephrology
- Other types of surgery
- Anaesthesiology

- Intensive care
- Accident and emergency medicine
- Medical interns or residents training in these specialties

Exclusion

- Dental surgery
- Oral and maxillofacial surgery

Other specialists not elsewhere classified

Inclusion

- Other specialists not elsewhere classified
- Medical interns or residents training in these other specialties

Medical doctors not further defined (ISCO-08 code: 2210)

Inclusion

- Medical practitioners who cannot be classified in the other categories
- Medical interns or residents who cannot be classified in the other categories

Sources and Methods

Australia

Source of data: **Austrian Medical Association**, Register of practising physicians.

Reference period: 31st December.

Coverage:

- Included are domestic and foreign practising physicians who are licensed to practice according to the Austrian legislation and who are registered at the Austrian Medical Association (head count).
- Included are salaried and self-employed practising physicians in different places of service provision (private practices, hospitals, etc.).
- Included are medical interns and residents. However they cannot be separated by specialisation or progress of training, hence they are all reported in the category “Medical doctors not further defined”.
- Included are dental and maxillofacial surgeons. According to the Austrian Medical Doctors Act and the Austrian Medical Education Act 2015, dental and maxillofacial surgeons are clearly a medical profession and not a dental profession.
- Excluded are dentists and stomatologists.
- Excluded are physicians who do not provide services to individual patients (in pharmaceutical industry, administration, research, etc.).
- Excluded are physicians working abroad, unemployed and retired physicians.

Note:

- Since 2002 legally qualified and approbated foreign physicians are included.
- Since 2013 physicians aged 65 years or more who run their private practice with only few patients and below a considerable income limit have to be registered by the Austrian Medical Association.

Deviation from definition:

- Until 2015, the Austrian Medical Association double counted physicians who had graduated as general practitioners as well as specialists. This concerns about 200 to 300 cases in the latest years. Therefore the sum of physicians by categories is higher than the total number of practising physicians until 2015.

Break in time series: In 2018 there was a temporary change in the allocation algorithms for the different types of doctors (general practitioner, specialists), which led to a data variation in time series (for reasons of data compatibility between national and international data, this variation is not levelled out).

General medical practitioners

Coverage: Includes all general practitioners (with and without a private practice).

Break in time series:

- 2016: The group of other general medical practitioners also included approbated foreign physicians up to and including 2015. Since 2016, it has no longer been possible to register as an approbated doctor. Approved physicians are now registered as general practitioners or specialists.
- 2018-19: Temporary change in 2018 in the allocation of doctors.

General practitioners

Coverage: Includes general practitioners who run a private practice.

Break in time series:

- 1995: Before 1995, data include freelancing general practitioners without private practice.
- 2018-19: Temporary change in 2018 in the allocation of doctors.

Other generalist (non-specialist) medical practitioners

Coverage: Includes general practitioners who do not run a private practice, mainly general practitioners in hospitals.

Break in time series:

- 1995: From 1995 onwards, data include freelancing general practitioners without private practice.
- 2016: The group of other general medical practitioners also included approbated foreign physicians up to and including 2015. Since 2016, it has no longer been possible to register as an approbated doctor. Approved physicians are now registered as general practitioners or specialists.
- 2018-19: Temporary change in 2018 in the allocation of doctors.

General paediatricians

Coverage: Includes the specialisation General paediatrics.

Break in time series: 2018-19: Temporary change in 2018 in the allocation of doctors.

Obstetricians and gynaecologists

Coverage: Includes Gynaecology and obstetrics; Medical genetics since 2007 (replacing Medical biology from 1995 to 2006).

Psychiatrists

Coverage: Includes “Psychiatry and neurology”; “Psychiatry”; “Psychiatry and psychotherapeutic medicine”; “Child psychiatry” since 2007; and “Child psychiatry and psychotherapeutic medicine” since 2016.

Break in time series: 2018-19: Temporary change in 2018 in the allocation of doctors.

Medical group of specialists

Coverage: Includes:

- Internal Medicine (Internal medicine; Physical medicine and general rehabilitation; Medical physiology of physical strain since 1995; Special prophylaxis and tropical medicine since 1995; Internal medicine and infectiology since 2016; Internal medicine and nephrology since 2016; Internal medicine and rheumatology since 2016; Internal medicine and angiology since 2019).
- Cardiologists (Internal medicine and cardiology since 2016).
- Endocrinologists (Endocrinology is not a separate specialisation, but a three years training in Endocrinology and metabolic diseases in addition to Internal medicine – counted as specialists in Internal medicine; Intern medicine and endokrinology and diabetology since 2018).
- Gastroenterologists (Internal medicine and gastroenterology / hepatology since 2016).
- Pulmology / Respiratory medicine (Pulmology; Internal medicine and pneumology since 2016).
- Oncologists (Internal medicine and haematology / internistic oncology since 2016).
- Immunologists (Clinical Immunology since 1995).
- Neurologists (Neurology and Psychiatry; Neurology since 1995).
- Oto-rhino-laryngologists
- Radiologists (Radiologists; Radiotherapists-Radio-oncologists since 1995; Nuclear medicine; Diagnostic radiology from 1995 to 2015).
- Microbiology-bacteriologists (Clinical microbiology and hygiene since 1995; Clinical microbiology and virology since 2016; Tumor biology since 1995; Virology since 1995; Pharmacology and toxicology since 1995, replacing Pharmacology up to 1994).
- Haematologists (Transfusion medicine since 1995).
- Dermatologists (Dermatology and venerology)

- Pathologists (Forensic medicine; Pathology up to 2015; Clinical pathology and molecular pathology since 2016; Clinical pathology and neuropathology since 2016).
- Occupational medicine (Occupational medicine since 1995; Occupational medicine and applied physiology since 2016; Medical and chemical laboratory diagnostics; Microbiological-serologic laboratory diagnostics; Social medicine since 1995; Public health since 2016).

Break in time series: 2018-19: Temporary change in 2018 in the allocation of doctors.

Surgical group of specialists

Coverage: Includes:

- General surgeons (General surgery up to 2015; General surgery and visceral surgery since 2016; Paediatric surgery; Oral and maxillofacial surgery).
- Neurological surgeons (Neurologic surgery).
- Plastic surgeons (Plastic surgery).
- Ophthalmologists (Ophthalmology and optometry).
- Orthopaedics (Orthopaedics; Orthopaedics and orthopaedic surgery since 2016; Orthopaedics and traumatology since 2018).
- Other types of surgery (Cardiac surgery since 2007; Thoracic surgery since 2007, General surgery and vascular surgery since 2016).
- Intensive care and anaesthesiologists (Anaesthesiology and intensive care; Internal medicine and intensive care since 2016).
- Urology, nephrology (Urology).
- Accident and emergency medicine (Accident medicine).

Break in time series: 2018-19: Temporary change in 2018 in the allocation of doctors.

Other specialists not elsewhere classified

Coverage: Includes Anatomy; Histology and embryology up to 2005; Histology, embryology and cell biology since 2006; Neurobiology since 1995; Neuropathology since 1995; Pathophysiology since 1995; Physiology; Theoretical medicine.

Note: Due to software conversions, changes in the physician training regulations and various changes in the legal framework for the practice of medicine, a disproportionately high number of specialist medical practitioners could not be assigned to any (dominant) category in 2015.

Break in time series: 2018-19: Temporary change in 2018 in the allocation of doctors.

Medical doctors not further defined

Coverage: Included are physicians in training because it is not possible to separate the specialties of training.

Break in time series: Changes in the medical training regulations led to an increase in the number of registrations of doctors in training in 2015.

Austria

Source of data: **Austrian Medical Association**, Register of practising physicians.

Reference period: 31st December.

Coverage:

- Included are domestic and foreign practising physicians who are licensed to practice according to the Austrian legislation and who are registered at the Austrian Medical Association (head count).
- Included are salaried and self-employed practising physicians in different places of service provision (private practices, hospitals, etc.).
- Included are medical interns and residents. However they cannot be separated by specialisation or progress of training, hence they are all reported in the category “Medical doctors not further defined”.
- Included are dental and maxillofacial surgeons. According to the Austrian Medical Doctors Act and the Austrian Medical Education Act 2015, dental and maxillofacial surgeons are clearly a medical profession and not a dental profession.
- Excluded are dentists and stomatologists.
- Excluded are physicians who do not provide services to individual patients (in pharmaceutical industry, administration, research, etc.).
- Excluded are physicians working abroad, unemployed and retired physicians.

Note:

- Since 2002 legally qualified and approbated foreign physicians are included.
- Since 2013 physicians aged 65 years or more who run their private practice with only few patients and below a considerable income limit have to be registered by the Austrian Medical Association.

Deviation from definition:

- Until 2015, the Austrian Medical Association double counted physicians who had graduated as general practitioners as well as specialists. This concerns about 200 to 300 cases in the latest years. Therefore the sum of physicians by categories is higher than the total number of practising physicians until 2015.

General medical practitioners

Coverage: Includes all general practitioners (with and without a private practice).

Break in time series: The group of other general medical practitioners also included approbated foreign physicians up to and including 2015. Since 2016, it has no longer been possible to register as an approbated doctor. Approved physicians are now registered as general practitioners or specialists.

General practitioners

Coverage: Includes general practitioners who run a private practice.

Break in time series: Before 1995, data include freelancing general practitioners without private practice.

Other generalist (non-specialist) medical practitioners

Coverage: Includes general practitioners who do not run a private practice, mainly general practitioners in hospitals.

Break in time series:

- From 1995 onwards, data include freelancing general practitioners without private practice.
- The group of other general medical practitioners also included approbated foreign physicians up to and including 2015. Since 2016, it has no longer been possible to register as an approbated doctor. Approved physicians are now registered as general practitioners or specialists.

General paediatricians

Coverage: Includes the specialisation General paediatrics.

Obstetricians and gynaecologists

Coverage: Includes Gynaecology and obstetrics; Medical genetics since 2007 (replacing Medical biology from 1995 to 2006).

Psychiatrists

Coverage: Includes “Psychiatry and neurology”; “Psychiatry”; “Psychiatry and psychotherapeutic medicine”; “Child psychiatry” since 2007; and “Child psychiatry and psychotherapeutic medicine” since 2016.

Medical group of specialists

Coverage: Includes:

- Internal Medicine (Internal medicine; Physical medicine and general rehabilitation; Medical physiology of physical strain since 1995; Special prophylaxis and tropical medicine since 1995; Internal medicine and infectiology since 2016; Internal medicine and nephrology since 2016; Internal medicine and rheumatology since 2016).
- Cardiologists (Internal medicine and cardiology since 2016).
- Endocrinologists (Endocrinology is not a separate specialisation, but a three years training in Endocrinology and metabolic diseases in addition to Internal medicine – counted as specialists in Internal medicine; Intern medicine and endokrinology and diabetology since 2018).
- Gastroenterologists (Internal medicine and gastroenterology / hepatology since 2016).
- Pulmology / Respiratory medicine (Pulmology; Internal medicine and pneumology since 2016).
- Oncologists (Internal medicine and haematology / internistic oncology since 2016).
- Immunologists (Clinical Immunology since 1995).
- Neurologists (Neurology and Psychiatry; Neurology since 1995).
- Oto-rhino-laryngologists
- Radiologists (Radiologists; Radiotherapists-Radio-oncologists since 1995; Nuclear medicine; Diagnostic radiology from 1995 to 2015).

- Microbiology-bacteriologists (Clinical microbiology and hygiene since 1995; Clinical microbiology and virology since 2016; Tumor biology since 1995; Virology since 1995; Pharmacology and toxicology since 1995, replacing Pharmacology up to 1994).
- Haematologists (Transfusion medicine since 1995).
- Dermatologists (Dermatology and venerology)
- Pathologists (Forensic medicine; Pathology up to 2015; Clinical pathology and molecular pathology since 2016; Clinical pathology and neuropathology since 2016).
- Occupational medicine (Occupational medicine since 1995; Occupational medicine and applied physiology since 2016; Medical and chemical laboratory diagnostics; Microbiological-serologic laboratory diagnostics; Social medicine since 1995; Public health since 2016).

Surgical group of specialists

Coverage: Includes:

- General surgeons (General surgery up to 2015; General surgery and visceral surgery since 2016; Paediatric surgery; Oral and maxillofacial surgery).
- Neurological surgeons (Neurologic surgery).
- Plastic surgeons (Plastic surgery).
- Ophthalmologists (Ophthalmology and optometry).
- Orthopaedics (Orthopaedics; Orthopaedics and orthopaedic surgery since 2016; Orthopaedics and traumatology since 2018).
- Other types of surgery (Cardiac surgery since 2007; Thoracic surgery since 2007, General surgery and vascular surgery since 2016).
- Intensive care and anaesthesiologists (Anaesthesiology and intensive care; Internal medicine and intensive care since 2016).
- Urology, nephrology (Urology).
- Accident and emergency medicine (Accident medicine).

Other specialists not elsewhere classified

Coverage: Includes Anatomy; Histology and embryology up to 2005; Histology, embryology and cell biology since 2006; Neurobiology since 1995; Neuropathology since 1995; Pathophysiology since 1995; Physiology; Theoretical medicine.

Note: Due to software conversions, changes in the physician training regulations and various changes in the legal framework for the practice of medicine, a disproportionately high number of specialist medical practitioners could not be assigned to any (dominant) category in 2015.

Medical doctors not further defined

Coverage: Included are physicians in training because it is not possible to separate the specialties of training.

Break in time series: Changes in the medical training regulations led to an increase in the number of registrations of doctors in training in 2015.

Belgium

Source of data: **Institut National d'Assurance Maladie Invalidité.** "Rapport Annuel".

Reference period: 31st December.

Coverage:

- Head count data.
- Excludes non-practising physicians, retired professionals and professionals working abroad. Includes professionals of foreign origin.

General practitioners

Coverage: Physicians with a minimal volume of patient contacts.

Other generalist (non-specialist) medical practitioners

Coverage: If other generalists exist in Belgium, they do not fulfill the activity requirements used in definition applied on the Belgian data and have only very small activity levels. Therefore, "0" has been reported.

Specialist medical practitioners (and sub-categories), Medical doctors not further defined

Coverage: Number of physicians with at least 1 patient contact.

Canada

Source of data:

- **Canadian Institute for Health Information.**
- **Canadian Post-M.D. Education Register (CAPER).**

Coverage:

- Professionally active physician counts from 1988 to current year reflect the summation of data from two distinct data sources: 'active' (see SMDB below) family medicine (includes general practitioners and specialists in family medicine and emergency family medicine) and specialist physicians from the Scott's Medical Database (SMDB) at the Canadian Institute for Health Information; and intern and resident (post-Medical Degree (M.D.) trainees) counts from the Canadian Post MD Education Registry (CAPER). General practitioner and specialist physician counts from 1968 to 1987 represent SMDB data only (i.e. excluding interns and residents). Counts of interns and residents by area of post-M.D. training (general practitioner or specialist) are not available for this period.

- **SMDB Specific Notes:** The data reflects figures as of December 31st of the reference year and includes the total number of 'active' civilian physicians in clinical and non-clinical (i.e. administration, research, teaching and industry positions) practice. Physicians are counted as active if they have a Medical Degree, are registered with a jurisdictional medical college, do not work for the military and have a valid mailing address. Data exclude non-registered physicians who requested that their information not be published as of December 31st of the reference year.

- For annual report results, detailed data tables and methodological notes concerning SMDB, please see CIHI's annual publication "Physicians in Canada". Available free for download at <https://www.cihi.ca/en/physicians-in-canada>.

- **CAPER Specific Notes:** The data on interns and residents exclude visa trainees and fellows. For Generalist medical practitioners, the distinction between general practitioner and specialist interns/residents is based on programs of post-MD training. For Specialist medical practitioners, data include physicians who have a Medical Degree and are completing a residency program as accredited by the Royal College of Physicians and Surgeons of Canada (RCPCSC).

Deviation from the definition: Data refer to professionally active physicians.

Break in time series: 1988. Interns and residents are included as of 1988.

Note: Provisional estimates for 2020, based on the average annual rate of growth between 2014 and 2019, subject to revision in 2022.

General practitioners

Coverage:

- **SMDB Note:** General practitioners include physicians who have a Medical Degree and have completed either a 1-year internship for certification in General Practice (General Practitioner) before 1992 or have a certification in Family Medicine or Emergency Family Medicine. As of 1992, a policy was implemented that requires minimum 2-year residency training before certification as a Family Physician (there is no more certification as a General Practitioner). SMDB Family Medicine counts also include "non-certified" specialists, physicians who are licensed as specialists within their jurisdictions, but who have not (yet) been certified by the specialty certification authorities noted above. The exceptions to this last inclusion are in Saskatchewan and Newfoundland and Labrador (starting in 2004); in Nova Scotia, New Brunswick and the Yukon (starting in 2007); in Quebec and Prince Edward Island (starting in 2009); and in Alberta (starting in 2010). In these jurisdictions, non-certified specialists are recorded as specialists in their practice of specialty.

- **CAPER Note:** The distinction between general practitioner and specialist interns/residents is based on programs of post-MD training.

Other generalist (non-specialist) medical practitioners

- In Canada, no physicians fall under the category "Other generalist medical practitioners".

General paediatricians

- **SMDB Note:** General paediatrics includes physicians who have a Medical Degree and have completed a 4-year residency program in Pediatrics as accredited by the Royal College of Physicians and Surgeons of Canada (RCPCSC).

- **CAPER Note:** General paediatrics residents include physicians who have a Medical Degree and are completing a 4-year residency program in Pediatrics as accredited by the Royal College of Physicians and Surgeons of Canada (RCSPC).

Obstetricians and gynaecologists

- **SMDB Note:** Obstetrics and gynaecology includes physicians who have a Medical Degree and have completed a 5-year residency program in Obstetrics and gynaecology or medical genetics as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

- **CAPER Note:** Obstetrics and gynaecology residents includes physicians who have a Medical Degree and are completing a 5-year residency program in obstetrics and gynaecology as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

Psychiatrists

- **SMDB Note:** Psychiatrists include physicians who have a Medical Degree and have completed a 5-year residency program in psychiatry as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

- **CAPER Note:** Psychiatry residents include physicians who have a Medical Degree and are completing a 5-year residency program in psychiatry as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

Medical group of specialists

- **SMDB Note:** Medical specialists include physicians who have a Medical Degree and have completed a residency program in internal medicine, paediatric subspecialties (paediatric cardiology or paediatric gastroenterology, for example), dermatology, neurology, otolaryngology, nuclear medicine, diagnostic radiology, radiation oncology, medical biochemistry, medical microbiology, general pathology, neuropathology, hematological pathology, anatomical pathology, community medicine and occupational medicine as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

- **CAPER Note:** Medical specialist residents include physicians who have a Medical Degree and are completing a residency program in internal medicine, paediatric subspecialties (paediatric cardiology or paediatric gastroenterology, for example), dermatology, neurology, nuclear medicine, diagnostic radiology, radiation oncology, medical biochemistry, medical microbiology, general pathology, neuropathology, hematological pathology, anatomical pathology, otolaryngology, gynaecologic oncology, community medicine and occupational medicine as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

Surgical group of specialists

- **SMDB Note:** Surgical specialists include physicians who have a Medical Degree and have completed a residency program in anesthesiology, cardiac surgery, cardiothoracic surgery, general surgery, neurosurgery, ophthalmology, emergency medicine, critical care medicine, orthopaedic surgery, plastic surgery and urology as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

- **CAPER Note:** Residents in surgical specialties include physicians who have a Medical Degree and are completing a residency program in anesthesiology, cardiac surgery, cardiothoracic surgery, general surgery, neurosurgery, ophthalmology, emergency medicine, critical care medicine, orthopaedic surgery, plastic surgery and urology as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC).

Other specialists not elsewhere classified

- **SMDB Note:** "Other specialists n.e.c." includes physicians who have a Medical Degree and have completed a residency program in physical medicine and rehabilitation as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC) and medical scientists.

- **CAPER Note:** Other residents include physicians who have a Medical Degree and are completing a residency program in physical medicine and rehabilitation as accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC). Other residents also include physicians who are completing a residency program in palliative medicine.

Medical doctors not further defined

Data not applicable.

Chile

Source of data: **Ministry of Health** using as original source the National Registry of Individual Health Providers from the **Health Superintendence** (www.superdesalud.cl), which was created by a law-ranking decree of November 2008, progressively installed since 2009, and is henceforth used. Its creation and maintenance are in charge of the Health Superintendence.

Coverage: Nationwide.

- Data include physicians employed in the public and private sectors.
- When the professional has more than one specialty, the last obtained has been chosen.
- The registration of Chilean Medical and Dentist Specialists in the National Registry of Individual Health Providers obey to a Specialties Certification System adopted by law-ranking decree in November 2008, updated in February 2013. This decree provides for transitory legal arrangements for physicians who were not postgraduates in the Specialty they practiced at the date when the law came into force. The deadline to achieve the corresponding proceedings has been delayed by decree until December 2014. For this reason, the share of General Practitioners in the total number of physicians will decline at least until the end of 2014. By 2015 1st January, the transitory legal arrangements of the decree on Specialties certification system has ended, so that since this date, the permanent legal rules apply.

Deviation from the definition: Data refer to physicians licensed to practice.

Generalist medical practitioners

- Data include General Practitioners and Family Doctors as well as Physicians of the “Destination and Formation Cycle” who are recent graduates and who go to work as general practitioners in areas of Chile where there is need for health professionals (sub attended sectors). Specialists in Family Medicine are included in the General Practitioners category.

- The breakdown between General practitioners and other generalist (non-specialist) medical is not provided since the general practitioners category included every kind of general or family practice.

Break in time series: The decrease in 2019 is due to some adjustment in the database from the Superintendence de Salud.

General Practitioners

Deviation from the definition: The information provided in the category of General Practitioners includes every kind of general practitioners wherever they practice (primary care doctors, ambulatory and hospital settings) and the Medical interns and residents.

Break in time series: The decrease in 2019 is due to some adjustment in the database from the Superintendence de Salud.

Specialist medical practitioners (and sub-categories)

- The inscription in the Register has been progressive, and the changes in the figures that can be observed between 2010 and 2014 are principally due to its progressive extension.

- When the physician is registered with more than one specialty or sub-specialty, the last certificated specialty or sub-specialty has been chosen.

Psychiatrists

- The number of Psychiatrists included in the Registry at the end of 2010, was only 356 and reached 791 at the end of 2011: this important increase between 2010 and 2011 is due to a massive incorporation of Psychiatrists in the Registry all along the year 2011.

Medical group of specialists

- In Chile, Community Medicine (Medicina Comunitaria) is associated to the specialty of Family Medicine. The role of these doctors consists in focusing in preventive medicine and health promotion, and in attending a community and families by providing primary health care, including rehabilitation care. For this reason, they are classified in the category "General Practitioners". However, those who specialised in Public Health have been classified in the "Medical Specialists" group. The specialty of Occupational Medicine does not exist in Chile.

Medical doctors not further defined

Data not applicable. (All the Medical Doctors licensed to practice are classified in one of the other categories.)

Colombia

Source of data:

- From 2011 onwards: Calculations by the Direction of Human Talent Development in Health, **Ministry of Health and Social Protection**.

Coverage: National.

Methodology: The estimation of stock considers the inputs (professionals graduates or with recognised diplomas in each period) less withdrawals (adjustments for migration, retirement and death).

Deviation from the definition: Estimation of the stock of specialist physicians, including general practitioners and specialists, who may not be exercising, without distinction of their field of exercise. Data thus include doctors working in areas that do not have direct contact with patients (e.g. physicians working in administration and research).

Estimation: Data presented are estimates.

Costa Rica

Data not available.

Czech Republic

Source of data: **Institute of Health Information and Statistics of the Czech Republic.**

- Till 2013: Registry of Physicians, Dentists and Pharmacists.

- Since 2019: statistical surveys on workers in providers of healthcare services.

Reference period: 31st December.

Estimation method: Since 2019, the structure according to fields of activity of practicing physicians (full-time equivalents) is taken from the statistical surveys on workers in providers of healthcare services and is adjusted to the total number of practicing physicians estimated from the National Registry of Reimbursed Health Services. Physicians with unknown field of activity were partly distributed in the specific categories of physicians (see notes below).

Break in time series: 2005 (a new legislation on medical professions came into effect in 2004), 2019 (new data source).

Note: From 2014 to 2018, data are not available. The Registry of Physicians, Dentists and Pharmacists was legislatively terminated on 31. 12. 2013.

Generalist medical practitioners (General practitioners, Other generalist (non-specialist) medical practitioners)

Coverage:

- Practising GPs for adults and GPs for children and adolescents are counted as General Practitioners.

- There are no other generalists/non-specialists in the Czech Republic.

Estimation method: Till 2000 and since 2019 only estimation of total number of GPs for children and adolescents based on split of total number of pediatricians. Since 2019, all physicians with unknown field of activity but working in offices of GPs for adults or GPs for children and adolescents were also included.

General paediatricians

Coverage: Adolescent medicine, Neonatology, Paediatrics.

Note: Since 2019, all paediatricians working in offices of GPs for children and adolescents were included under general medical practitioners.

Obstetricians and gynaecologists

Coverage: Gynaecology and obstetrics, Medical genetics, Paediatric gynaecology, Reproductive medicine.

Estimation method: Since 2019, all physicians with unknown field of activity but working in offices of gynaecology were also included.

Psychiatrists

Coverage: Addictive diseases, Gerontopsychiatry, Paediatric and adolescent psychiatry, Psychiatry.

Medical group of specialists

Coverage: Diabetology and endocrinology (since 2010 endocrinology is not a separate branch), Geriatrics, Infectious medicine, Internal medicine, Rehabilitation and physical medicine, Sexology, Sports medicine, Hyperbaric medicine and oxygenotherapy, Palliative medicine and pain management, Cardiology, Paediatric cardiology, Angiology, Gastroenterology, Paediatric gastroenterology and hepatology, Paediatric pneumology, Pneumology, Clinical oncology, Paediatric oncology and haemato-oncology, Allergology and medical immunology, Rheumatology, Paediatric rheumatology, Neurology, Paediatric neurology, Audiology and phoniatriy, Otorhinolaryngology, Paediatric otorhinolaryngology, Interventional radiology, Neuroradiology, Nuclear medicine, Radiation oncology, Radiology and imaging methods, Paediatric radiology, Medical microbiology, Haematology and transfusion, Corrective dermatology, Dermatovenerology, Paediatric dermatovenerology, Forensic medicine, Pathological anatomy, Occupational medicine, since 2011 including community medicine (including Assessment medicine, Epidemiology, General and communal hygiene, Hygiene and epidemiology, Hygiene of children and youth, Nutrition hygiene).

Estimation method: Since 2019, all physicians with unknown field of activity but working in institutes for long-term patients, hospices and providers of home care were also included.

Surgical group of specialists

Coverage: Paediatric surgery, Surgery, Neurosurgery, Burn medicine, Plastic surgery, Ophthalmology, Orthopaedics, Orthopedical prosthesis, Cardiosurgery, Thoracic surgery, Vascular surgery, Anaesthesiology and resuscitation, Intensive medicine, Paediatric nephrology, Urology, Nephrology, Paediatric urology, Emergency medicine, Traumatology.

Estimation method: Since 2019, all physicians with unknown field of activity but working in medical transport and emergency medical service were also included.

Other specialists not elsewhere classified

Coverage: Clinical biochemistry, Clinical pharmacology, Public health care, till 2013 also Maxillo-facial surgery and all other specialties, till 2010 also community medicine (including Assessment medicine, Epidemiology, General and communal hygiene, Hygiene and epidemiology, Hygiene of children and youth, Nutrition hygiene).

Break in time series: 2011 (since 2011, community medicine (including Assessment medicine, Epidemiology, General and communal hygiene, Hygiene and epidemiology, Hygiene of children and youth, Nutrition hygiene) is included in the "medical group of specialists").

Medical doctors not further defined

Since 2019, physicians with unknown field of activity who were not attributed to any of the above categories of physicians.

Denmark

Source of data: **The Danish Health Data Authority**, Labour Register for Health Personnel.

Reference period: 31st December.

Coverage: Data refer to "practising" physicians.

Generalist medical practitioners

Coverage:

- General practitioner has existed as a specialty since 1994.
- The breakdown between General practitioners and Other generalist (non-specialist) medical practitioners is not available.

Specialist medical practitioners (and sub-categories)

Coverage:

- If the physician has more than one specialty, the one obtained at the latest date is counted.

Medical doctors not further defined

Break in time series: 1994. Up to 1993, GPs are included in 'other categories' as this category was not categorised as a specialty in Denmark.

Estonia

Source of data: Annual reports, **National Institute for Health Development**, Department of Health Statistics.

Reference period:

- 1980-2012: 31st of December.

- Since 2013: November.

Coverage:

- The data refer to practising physicians.

- Medical staff working in research or other areas is not included. Military area is included since 2010.

Break in time series: 2013.

- For 1998-2012, the head count distribution is made according to their main occupational activity.

- The data collection methodology was changed in 2013. Aggregated data collection was replaced with data collection on a personal basis. From 2013, the predominant (main) area of practice is based on the occupation with the highest workload.

- For 1998-2012 resident physicians are not included by category, they are reported in the group of “medical doctors not further defined”.

Note: The data series for “Practising physicians” and “physicians by categories” in 2013-2015 were updated in 2018 after data revision. The classification by categories has been harmonized over the years in 2020.

General practitioners

Coverage: The category “General practitioners” contains “family doctors” and “school doctors”.

Break in time series: For 1998-2012 resident physicians are not included, they belong to the group of “medical doctors not further defined”.

Other generalist (non-specialist) medical practitioners

Coverage: The category “Other generalist (non-specialist) medical practitioners” contains “general/non-specialist practitioners”.

Break in time series: For 1998-2012 resident physicians are not included, they belong to the group of “medical doctors not further defined”.

Obstetricians and gynaecologists

Coverage: Also medical geneticists are included under the category “Obstetricians and gynaecologists”.

Break in time series: For 1998-2012 resident physicians are not included, they belong to the group of “medical doctors not further defined”.

Medical group of specialists

Coverage: Also the clinical laboratory physicians and rehabilitation therapists are reported under category “Medical group of specialists”.

Break in time series: For 1998-2012 resident physicians are not included, they belong to the group of “medical doctors not further defined”.

Surgical group of specialists

Coverage: Also the nephrologists are reported under category “Surgical group of specialists” (“Urologists”) according to the definition (although in Estonia nephrologists are continually considered under the category of “Medical group of specialists” (“Internal medicine”) as they don’t do surgical work. Surgical work is done by urologists).

Break in time series: For 1998-2012 resident physicians are not included, they belong to the group of “medical doctors not further defined”.

Other specialists not elsewhere classified

Coverage: the category “Other specialists not elsewhere classified” is not represented.

Medical doctors not further defined

-Until 2012, physicians in training were all included in “Medical doctors not further defined”.
Break in time series: 2013. For 1998-2012 resident physicians are included in the group of “medical doctors not further defined”. Since 2013 all physicians in training are classified in the other categories.

Finland

Source of data:

- Until 2009: **Finnish Medical Association**. Register of the Finnish Medical Association which is updated by a yearly survey covering all physicians licensed to practice in Finland who are not retired.
- 2010: **Finnish Medical Association**. Data from “Physicians’ Working Conditions and Health 2010” Survey.
- 2011-2013: **Finnish Medical Association**. Data from “Finnish Medical Association Labour Market Survey”, 2012, 2013 and 2014 Surveys.
- 2014: **Finnish Medical Association**. Data from “Physicians’ Working Conditions and Health 2015” Survey.
- 2015: **Finnish Medical Association**. Data from “Finnish Medical Association Labour Market Survey 2016”.

Reference period:

- Until 2009: Mid-March.
- 2010: End of year.
- Since 2011: March (e.g. March 2016 for 2015 data).

Coverage:

- Until 2009: Data include physicians who are under 64 years old. All physicians working in primary care are classified as GP’s regardless of their specialty. The remaining specialist physicians are classified according to their last specialty. The unspecialised physicians not working in primary care and the physicians currently specialising are classified as “Medical doctors not further defined”.
- Since 2010: Data refer to professionally active physicians under 65 years old. All physicians working in primary care are classified as GP’s regardless of their specialty. The remaining specialist physicians and physicians currently specializing are classified according to their last specialty. The unspecialised physicians not working in primary care are classified as “Medical doctors not further defined”.

Deviation from the definition: Data refer to professionally active physicians.

Break in time series: 2010. Before 2010, physicians currently specialising are classified as “Medical doctors not further defined”. Since 2010, they are classified according to their last specialty.

Generalist medical practitioners

Coverage: All physicians working in primary care are classified as GP’s regardless of their specialty.

- There is no possibility of distinguishing between general practitioners and other generalist medical practitioners. In Finland it is possible that the same physician work both in the public health primary care sector (as GP) as well as in the hospital.

General paediatricians

Coverage: Includes physicians specialised in child neurology and paediatricians not working in primary care.

Obstetricians and gynaecologists

Coverage: Includes physicians specialised in obstetrics and gynaecology and clinical genetics not working in primary care.

Psychiatrists

Coverage: Includes physicians specialised in child psychiatry, adolescent psychiatry, forensic psychiatry and psychiatry not working in primary care.

Medical group of specialists

Coverage: Includes physicians specialised in cardiology, clinical haematology, clinical microbiology, clinical neurophysiology, clinical physiology and nuclear medicine, dermatology and allergology, endocrinology, forensic medicine, gastroenterology, geriatrics, infectious diseases, internal medicine, neurology, occupational health, oncology, otolaryngology, pathology, phoniatics, physical and rehabilitation medicine, radiology, respiratory medicine and allergology and rheumatology not working in primary care.

Surgical group of specialists

Coverage: Includes physicians specialised in anaesthesiology and intensive care, cardiothoracic surgery, gastroenterological surgery, general surgery, hand surgery, nephrology, neurosurgery, ophthalmology, oral and maxillofacial surgery, orthopaedics and traumatology, paediatric surgery, plastic surgery, urology and vascular surgery not working in primary care.

Other specialists not elsewhere classified

Coverage: Includes physicians specialised in sports medicine, public health and occupational health not working in primary care.

Medical doctors not further defined

Coverage:

- Includes physicians not elsewhere classified.
- The unspecialised physicians not working in primary care are classified as “Medical doctors not further defined”.
- Up to 2009, data also include physicians currently specialising who are not working in primary care.

France

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

- Until 2010 (01/01/2011): Répertoire ADELI (DREES).
- From 2011 (01/01/2012): RPPS (Répertoire partagé des professionnels de santé). Revision of RPPS production chains in 2020.

Reference period: 31st December.

Coverage:

- Data refer to active physicians until 2010. As of 2011, data refer to practising physicians.
- Data refer to metropolitan France and D.O.M. (overseas departments).
- All public and private hospitals and clinics are covered.
- Stomatologists and dentists are not included in the number of physicians.
- Interns and residents are not included.

Deviation from the definition:

- The data refer to active physicians until 2010.
- Interns and residents are not included.

Break in time series:

- In 2009 (01/01/2010), there is a break in the series for physicians because of a change in the statistical methodology. Therefore the evolution between 2008 and 2009 must not be interpreted as a decrease in the number of professionals. (The change in methodology had an impact of about -1.3% on the number of doctors in metropolitan France in 2009).
- In 2011 (01/01/2012), there is a second break in the series, because of the change in the data source (RPPS since 2011).
- Since 2011, the breakdown by categories is provided for practising physicians (before, it was for professionally active physicians).

Generalist medical practitioners

Coverage: GPs and non-specialist practitioners are included in the data. They can be salaried (in hospitals or other institutions such as nursing homes, etc.), self-employed or both. They may also report specific skills (e.g. allergology, sports medicine) or practice as homeopath or acupuncturist. Physicians with a foreign (non-EEA) degree who are allowed to practice in hospitals and registered at the French National Medical Council, but without a speciality recognised in France, are included in these data.

- The new source (RPPS) makes it possible to give the number of *practising* generalist medical practitioners since 2011.

General practitioners

Coverage: Since 2012, this category refers to family doctors. Generalists working in hospitals are included under other generalist (non-specialist) medical practitioners.

Other generalist (non-specialist) medical practitioners

Coverage: Since 2012, this category includes the generalist medical practitioners who practice only in hospitals.

Specialist medical practitioners

- The new source (RPPS) makes it possible to give the number of *practising* specialist medical practitioners since 2011.

General paediatricians

Coverage: Data include paediatrics as reported in ADELI. Data exclude child surgery and child/adolescent psychiatry.

- The new source (RPPS) makes it possible to give the number of *practising* paediatricians since 2011.

Obstetricians and gynaecologists

Coverage: Data correspond to ADELI codes 17 (medical gynecology), 18 (obstetric gynecology), 32 (obstetrics), 48 (medical and obstetric gynecology), and 68 (genetics).

- The new source (RPPS) makes it possible to give the number of *practising* obstetricians and gynaecologists since 2011.

Psychiatrists

Coverage: Data correspond to ADELI codes 31 (Neuropsychiatry), 39 (Psychiatry), 40 (Child and adolescent psychiatry).

- The new source (RPPS) makes it possible to give the number of *practising* psychiatrists since 2011.

Medical group of specialists

Break in time series: As of 2011, “Geriatrics” has been integrated into “Internal medicine” and the medical group of specialists. In the former source (Répertoire ADELI), Geriatrics was not considered as a full specialty.

- The new source (RPPS) makes it possible to give the number of *practising* medical specialists since 2011.

Surgical group of specialists

Coverage: Stomatologists and maxillofacial surgeons are not included in the data.

- The new source (RPPS) makes it possible to give the number of *practising* surgical specialists since 2011.

Other specialists not elsewhere classified

Coverage: Data include physicians working in physical medicine and rehabilitation, and medical research.

- The new source (RPPS) makes it possible to give the number of other *practising* specialists since 2011.

Medical doctors not further defined

- Data not applicable.

Germany

Source of data: **German Medical Association**, Medical practitioner statistics 2019; special calculation by the Federal Statistical Office on base of data from the German Medical Association, <http://www.gbe-bund.de> or <http://www.baek.de>.

Reference period: 31st December.

Coverage:

- Data contain the number of generalist and specialist medical practitioners who are actively practising medicine in public and private institutions and provide services directly to patients (head-count data).

- The data exclude dentists, stomatologists and physicians with specialty “dental, oral and maxillofacial surgery”.

- Medical interns and resident physicians specialising in general medicine or in any other specialty are reported in the corresponding categories.

- Students who have not yet graduated are excluded.

Estimation method:

- The numbers of medical interns or residents by categories are estimations and are based on a special calculation by the Federal Statistical Office. Table 9 of the Medical practitioner statistics of the German Medical Association

(<http://www.bundesaerztekammer.de/ueber-uns/aerztestatistik/aerztestatistik-2019/anzahl-der-erteilten-amerkennungen/>) forms the basis for this estimation of physicians in continuing medical education by specialty. It contains the annually pronounced recognitions of the individual specialty designations. Taking into account the minimum period prescribed from the (Model) Regulations on Continuing Medical Education of the German Medical Association, the number of physicians in further training can be estimated by specialties. The following assumptions are made: Every physician, who has received recognition, has achieved this in the prescribed minimum period, the specialty has not changed in between and it is his first training as a specialist.

Note: The time series have been fully revised in 2018, with the estimation method detailed above.

General practitioners

Coverage:

- Included are physicians with specialty “general medicine”, physicians without specialty working in the ambulatory sector and general practitioners (“Praktischer Arzt”).
- Included are interns and resident physicians specialising in general practice.
- Excluded are students who have not yet graduated.

Other generalist (non-specialist) medical practitioners

Coverage:

- Included are practising physicians without specialty working in the stationary sector.
- Included are interns and resident physicians without any area of specialisation yet working in the stationary sector.
- Excluded are students who have not yet graduated.

General paediatricians

Coverage:

- Includes practising physicians with specialty “general paediatrics” and medical interns or residents specialising in paediatrics.
- Excludes physicians with a paediatric subspecialisation (e.g. paediatric surgery, paediatric oncology, neonatology, etc).

Obstetricians and gynaecologists

Coverage:

- Includes practising physicians with specialty “gynaecology and obstetrics” and “human genetics” and medical interns or residents specializing in obstetrics and gynaecology.
- Excluded are practising physicians with subspecialisation “gynaecological oncology”.

Psychiatrists

Coverage:

- Includes practising physicians with specialty “psychiatry and psychotherapy”, “paediatric psychiatry and psychotherapy”, “neuropsychiatry” and “psychosomatal medicine and psychotherapy”.
- Includes medical interns or residents training in these psychiatric specialties.

Medical group of specialists

Coverage:

- This group includes practising physicians with medical specialties (e.g. internal medicine, cardiology, neurology, radiology, pathology, oncology, occupational medicine) and medical interns or residents training in these specialties.
- It excludes practising physicians with specialties “surgery”, “gynaecology and obstetrics”, “paediatrics”, “psychiatry” and “general practitioners”.

Surgical group of specialists

Coverage:

- Includes practising physicians with specialty “surgery” (e.g. general, neurological, plastic, paediatric), “orthopaedic and accident surgery”, “ophthalmology”, “urology” and “anaesthesiology and intensive therapy”.
- Includes medical interns or residents training in these specialties.
- The data exclude physicians with specialty “dental, oral and maxillofacial surgery”.

Other specialists not elsewhere classified

Coverage:

- Includes practising physicians and medical interns and residents with all specialties not elsewhere classified (e.g. biochemistry, physiology, sports medicine).

Medical doctors not further defined

- Data are available separately for the categories “Generalist medical practitioners” and “Specialist medical practitioners” (and for all sub-categories), hence there are no “Medical doctors not further defined”.

Greece

Source of data: Hygiene Divisions and Sections attached to prefectures, Athens Medical Association and Pireas Medical Association. Annual Doctors and Dentists survey, <http://www.statistics.gr/el/statistics/-/publication/SHE09/>.

Reference period: 31st December.

Deviation from the definition: Data refer to licensed to practice physicians. Unemployed physicians are included (however, retired and working abroad physicians are not included).

Break in time series: 2014. Until 2013, all physicians in training are included in the category “Medical doctors not further defined”. From 2014 onwards, they are allocated in the relevant specific categories.

General practitioners

Break in time series: From 2014 onwards, general practitioners in training are included in this category.

Other generalist (non-specialist) medical practitioners

Coverage: This category includes rural doctors.

General paediatricians

Break in time series: From 2014 onwards, general paediatricians in training are included in this category.

Obstetricians and gynaecologists

Break in time series: From 2014 onwards, obstetricians and gynaecologists in training are included in this category.

Psychiatrists

Break in time series: From 2014 onwards, psychiatrists in training are included in this category.

Medical group of specialists

Break in time series: From 2014 onwards, medical specialists in training are included in this category.

Surgical group of specialists

Break in time series: From 2014 onwards, surgical specialists in training are included in this category.

Other specialists not elsewhere classified

Break in time series: From 2014 onwards, specialists in training belonging to this category are included.

Medical doctors not further defined

Break in time series: In this category, data prior to the 2014 year of reference include the physicians in training and the physicians without specialty. From 2014 onwards, the physicians in training are allocated in the relevant categories, so only physicians without any specialty remain in the category ‘Medical doctors not further defined’.

Hungary

Source of data:

- From 2017, **National Healthcare Service Center** (ÁEEK in Hungarian) www.enkk.hu. Full title of the database: Operational register.

Reference period: 31st December.

Coverage: From 2017:

- Specialist and non specialist doctors (except medical interns and residents):
 - * from the Operational Register: health professionals who entitled to pursue the activities of a doctor in Hungary
 - * Used method to avoid double counting of doctors who have more than one specialty: the last specialty for which doctors have received registration
- Residents:
 - * non specialist doctors participating in the Hungarian residency programme.
- The medical interns and residents are allocated according to the specialty in which they are training.

Iceland

Source of data:

- 2016 and onwards: **The Directorate of Health**, Register of Licenced Health Care Professionals.
- 2003-2015: **The Directorate of Health**, Register of Physicians.
- Until 2002: **The Directorate of Health**. Data from inpatient care institutions, health centres and The State Social Security Institute.

Reference period: 31st December.

Coverage:

- Head count data.
- Includes those physicians who are 70 years old or younger with permanent residence in Iceland (Icelanders or foreigners).
- Excludes retired professionals and professionals working abroad.
- May include a very small number of non-practising physicians.
- In cases where a physician has more than one specialty, the counted specialisation is the newest specialty. Should two specialties be registered on the same day, the one that is more specialised is included.
- Physicians in training for a specialization (physicians licensed to practice) are included in the category "Medical doctors not further defined".
- Excludes medical students in training.

Break in time series:

- Break in series in 2005 due to revision of methodology. The methodology was altered in 2009 in such a way that registered domicile is now taken into account when counting the number of physicians, not only permanent residence. Figures for previous years, back to 2005, were revised accordingly.
- Break in series in 2016 is due to revision of methodology and change in data source. The methodology was altered in such a way that registered domicile is no longer taken into account when counting the number of physicians, only permanent residence. The data source is the Register of Licenced Health Care Professionals instead of the Register of Physicians, which no longer exists.

Other generalist (non-specialist) medical practitioners

- Data not available. Some practitioners may be included within the category "Medical doctors not further defined".

Obstetricians and gynaecologists

Coverage: Includes female endocrinology.

Medical doctors not further defined

Coverage: Physicians without a specialisation are included in "Medical doctors not further defined". Physicians in training for specialization (physicians licensed to practice) are included in this category (medical students in training not included).

Ireland

Physicians by categories (all categories)

Deviation from the definition: Data refer to physicians licensed to practice until 2013 and to practicing physicians since 2014.

Generalist medical practitioners

Source of data: see below for GPs and Other generalist (non-specialist) medical practitioners.

Coverage: Sum of General Practitioners and Other Generalist (non-specialist) medical practitioners.

Break in time series: 2009, 2011, 2014. (See below for GPs and Other generalists.)

General practitioners

Source of data:

-From 2017: Irish Medical Council of Ireland for family doctors (GPs), Irish College of General Practitioners (ICGP) for trainee GPs.

- 1996-2016: **Irish College of General Practitioners (ICGP).**

- Up to 1995: **General Medical Services Payments.**

Reference period: Data do not correspond to the same month each year.

Coverage: The number of General Practitioners is the number of GP's registered with the Irish College of General Practitioners (ICGP). The ICGP estimate that approx. 90% of GP's in Ireland are registered with them. Figures exclude physicians overseas and those over 70 years old.

Break in time series: 2011.

- From 2011, data include general practitioners (GPs) in training. They were not included prior to 2011.

Other generalist (non-specialist) medical practitioners

Source of data: **Medical Council of Ireland.**

Reference period: Data refer to 31st December.

Coverage:

- Data come from the registration statistics of the Medical Council of Ireland and include physicians registered by the Medical Council of Ireland who have entered and maintained their name as fully registered doctors in the Register of Medical Practitioners. The majority of doctors in this category are those registered in the Register of Medical Practitioners General Division. General registration is specifically for medical practitioners who have not completed specialist training and do not occupy an individually numbered, identifiable postgraduate training post. Also included are interns and supervised doctors. Data excludes trainee GPs.

Break in time series: 2009, 2011, 2012, 2014.

- Until 2008, specialists in training are included. (From 2009, they are included in Specialist medical practitioners).

- From 2011: GPs in training are excluded from final figures, trainee GPs had not been excluded previously,

- From 2012: Physicians registered with the EEA division with the medical council are excluded (see medical doctors not further defined) (very small number).

- Data from 2014 have been revised (in 2016) using data on the number of doctors registered with the Medical Council of Ireland who, in the last 12 months, have declared themselves active and who have worked in Ireland either full or part-time.

- Data refer to physicians licensed to practice until 2013 and to practicing physicians since 2014.

Specialist medical practitioners (and sub-categories)

Source of data: **Medical Council of Ireland.**

Reference period: Data refer to 31st December.

Coverage:

- Data come from the registration statistics of the Medical Council of Ireland and include physicians registered by the Medical Council of Ireland who have entered and maintained their name as fully registered doctors in the Register of Medical Practitioners Specialist Division. The registered specialty does not necessarily equal the area of current practice.

- Data on trainees for 2009 and 2010 come from the Trainee Specialist Division. For 2011-2013, data on trainees by specialty refer to the number of non-consultant hospital doctor posts, and is obtained from the Health Service Executive. From 2014, data on specialists is obtained from the Medical Council of Ireland.

- Up to 2013, physicians with more than one specialty are counted within each specialty separately as data refer to the total number of doctors and not the total number of specialties. Therefore, a small number of physicians may be counted twice as it is not possible to extract them individually. For this reason, the sum of specialist groups does not equal the total specialist medical practitioners.

Break in time series: 2011, 2013, 2014.

- Since 2011, data on trainees are reported by specialty. For 2011-2013, they refer to the number of non-consultant hospital doctor posts, and are obtained from the Health Service Executive. From 2014, data on trainees by specialty are sourced from the Medical Council of Ireland.

- In 2013, only the specialty which is the physician's main area of work is included.
- Data from 2014 have been revised (in 2020) using data on the number of doctors registered with the Medical Council of Ireland who, in the last 12 months, have declared themselves practicing and who have worked in Ireland either full or part-time. Only the most recent specialism was counted for doctors with more than one specialty. Data relates to the specialty registered which may be different to the area of practice.
- Data refer to physicians licensed to practice until 2013 and to practicing physicians since 2014.

Specialist medical practitioners

Break in time series: 2009, 2011.

- In 2009 and 2010, the total number of specialist medical practitioners includes specialists in training and general practitioners in training. However, trainee data for individual specialties are not available for 2009 and 2010. Hence, the sum of the specialties is lower than the total number of specialist medical practitioners presented. (Prior to 2009, specialists in training were included in Other generalist (non-specialist) medical practitioners).
- From 2011, data exclude general practitioners in training. Data on trainees by specialty from 2011 refer to the number of non-consultant hospital doctor posts, and is obtained from the Health Service Executive. From 2014, data on trainees by specialty are sourced from the Medical Council of Ireland.

Medical doctors not further defined

Source: **Medical Council of Ireland.**

Coverage: From 2012: Physicians registered with the Medical Council of Ireland 'Visiting European Economic Area (EEA) division'. This includes EU Doctors who are fully established to practice medicine in another EU member state. Doctors must hold a recognised primary medical qualification and (where applicable) higher specialist qualification.

- This category includes doctors specialized in Oral and maxillofacial surgery.

Note: Prior to 2012, EEA doctors were included in the "Other generalist (non-specialist) medical practitioners", this accounts for a small number of Doctors.

Israel

Source of data: The data are based on the Physicians License Registry which is maintained by the Medical Professions Division and the Health Information Division in the **Ministry of Health**, for which the demographic information is periodically updated from the Population Registry at the Ministry of Interior. The source for residents' data by categories is the **Israeli Medical Association registry**.

Reference period: End of the year.

Deviation from the definition: Data for all categories include professionally active physicians based on Ministry of Health data and the Israeli Medical Association registry.

General practitioners

Coverage: Data include professionally active specialists in family medicine and residents in family medicine.

Other generalist (non-specialist) medical practitioners

Coverage: Data include professionally active medical doctors (general) without any speciality.

General paediatricians

Coverage: Data include professionally active physicians with paediatrics specialty and residents specialising in paediatrics.

Obstetricians and gynaecologists

Coverage: Data include professionally active physicians with obstetrics and gynaecology specialty and residents specialising in obstetrics and gynaecology.

Psychiatrists

Coverage: Data include professionally active physicians with a psychiatric specialty and residents specialising in psychiatry.

Medical group of specialists

Coverage: Data include professionally active physicians with a specialty in the diagnosis and non-surgical treatment of physical disorders and diseases in the list in the definition, and residents specialising in those specialties.

Surgical group of specialists

Coverage: Data include professionally active physicians with surgical specialties in the list in the definition and residents specialising in those specialties.

Other specialists not elsewhere classified

Coverage: Data include professionally active physicians with specialties not elsewhere classified and residents specialising in those specialties.

Medical doctors not further defined

Data not applicable.

Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy

Generalist medical practitioners

Source of data: see General practitioners and Other generalist (non-specialist) medical practitioners below.

Coverage: sum of General practitioners and Other generalist (non-specialist) medical practitioners.

General practitioners

Source of data: **Ministry of Health** – General Directorate of digitalisation, health information system and statistics – Office of Statistics. Publication: “Attività gestionali ed economiche delle ASL e Aziende ospedaliere”, Annuario Statistico del Servizio Sanitario Nazionale - Assetto organizzativo, attività e fattori produttivi del SSN (published annually). Publication available on the website of the Ministry of Health. www.salute.gov.it/statistiche.

Reference period: 1st January.

Coverage: Total survey on all general practitioners practising for the National Health System. General practitioners provide the first level care to all citizens aged 14 and over (consultations, visits, prescription of medicines, and referrals for laboratory tests or specialist visits).

Other generalist (non-specialist) medical practitioners

Source of data: ISTAT provides data produced by IQVIA ITALIA – One-Key database. <https://www.iqvia.com/>.

Reference period: 31st December.

Coverage:

- Data refer to practising physicians.
- This category includes other (not in training) physicians not working as GPs/family doctors or as specialists and medical interns/residents specialising in general medicine.
- Medical interns and residents who have completed a basic medical university education and are undertaking postgraduate clinical training can provide services as generalist medical practitioners in the private sector only (not in the National Health Service). Medical interns and residents who are pursuing postgraduate training in general medicine are included as “other generalist medical practitioners”.

Specialist medical practitioners

Source of data: see sub-categories below.

Coverage:

- Data refer to practising physicians.
- Sum of General paediatricians, Obstetricians and gynaecologists, Psychiatrists, Medical group of specialists, Surgical group of specialists and Other specialists not elsewhere classified.
- Physicians in training are included in the specialties in which they are training.

General paediatricians

a) **For General paediatricians practising for the National Health System:**

Source of data: **Ministry of Health** – General Directorate of digitalisation, health information system and statistics – Office of Statistics. Publication: “Attività gestionali ed economiche delle ASL e Aziende ospedaliere”, Annuario Statistico del Servizio Sanitario Nazionale - Assetto organizzativo, attività e fattori produttivi del SSN (published annually). Publication available on the website of the Ministry of Health. www.salute.gov.it/statistiche.

Reference period: 1st January.

Coverage:

- Total survey on all paediatricians practising for the National Health System. They provide the first level care to all citizens under 14 (consultations, visits, prescription of medicines, and referrals for laboratory tests or specialist visits). They have a contract with the National Health System.

b) **For General paediatricians NOT practising for the National Health System:**

Source of data: ISTAT provides data produced by IQVIA ITALIA - OneKey database. <https://www.iqvia.com/>.

Reference period: 31st December.

Coverage:

- Practising Paediatricians NOT practising for the National Health System.

Obstetricians and gynaecologists, Psychiatrists, Medical group of specialists, Surgical group of specialists, Other specialists not elsewhere classified

Source of data: ISTAT provides data produced by IQVIA ITALIA – One-Key database. <https://www.iqvia.com/>.

Reference period: 31st December.

Coverage: Data refer to practising physicians by categories.

Medical doctors not further defined

Data not applicable.

Estimation method: The data for all categories (except General practitioners) are estimated from 2000 to 2011. The estimation is based on the proportion between the practising physicians by categories and the total of practising physicians. This proportion had small variations over time and therefore a linear regression of the data was possible.

Japan

Data not available, except for a few specialties below. In Japan, physicians are not separated into GPs and specialists.

General paediatricians, Obstetricians and gynaecologists, Psychiatrists

Source of data: **Ministry of Health, Labour and Welfare**. Survey of Physicians, Dentists and Pharmacists (published annually until 1981, and every two years from 1982).

Coverage: Head count data.

General paediatricians

Coverage:

- Data consist of pediatricians working at medical institutions (including those who work as clinical teaching staff at medical school hospitals). Data include foreign pediatricians licensed to practice. Data exclude pediatricians working in the areas such as industry, research and administration, pediatricians working abroad, and not-acting pediatricians.

- Data include doctors-in-training.

Obstetricians and gynaecologists

Coverage:

- Data consist of obstetricians working at medical institutions that fall under the department category of “obstetrics and gynaecology”, “obstetrics”, and “gynaecology” (including those who work as clinical teaching staff at medical school hospitals). Data include foreign obstetricians licensed to practice. Data exclude obstetricians working in the areas such as industry, research and administration, obstetricians working abroad, and not-acting obstetricians.

- Data include doctors-in-training.

Psychiatrists

Coverage:

- Data consist of psychiatrists working at medical institutions (including those who work as clinical teaching staff at medical school hospitals). Data include foreign psychiatrists licensed to practice. Data exclude psychiatrists working in the areas such as industry, research and administration, psychiatrists working abroad, and not-acting psychiatrists.
- Data include doctors-in-training.

Korea

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

Coverage:

- Data exclude retired physicians and physicians working abroad.
 - Until 2010, medical residents cannot be split by specialty, hence they are all included in “Other specialists n.e.c.”.
- From 2011 onwards, medical residents are classified according to the specialty in which they are training.
- Break in time series: 2011.

General practitioners

Coverage:

- Until 2010: Includes family medicine practitioners.
 - From 2011: Includes family medicine practitioners and medical residents training in family medicine.
- Break in time series: 2011. From 2011 onwards, medical residents training in family medicine are classified in general practitioners. (Until 2010, all medical residents are included in “Other specialists n.e.c.”).

Other generalist (non-specialist) medical practitioners

Coverage:

- Includes non-specialist medical practitioners and medical interns, general Korean oriental medicine doctors and Korean oriental medicine interns training in general practice.

General paediatricians, Obstetricians and gynaecologists, Psychiatrists, Medical group of specialists, Surgical group of specialists

Coverage:

- Until 2010: Includes practitioners working in medical institutions.
 - From 2011: Includes practitioners and residents working in medical institutions.
- Break in time series: 2011. From 2011 onwards, data include also medical residents.

Medical group of specialists

Coverage: Includes medical group of specialties: internal medicine, neurology, oto-rhino-laryngology, dermatology, radiology, radio-oncology, pathology, tuberculosis and occupational medicine.

Surgical group of specialists

Coverage: Includes general surgery, orthopaedics, neurological surgery, thoracic and cardiovascular surgery, plastic surgery, anaesthesiology, intensive care, ophthalmology, urology, and accident and emergency medicine.

Other specialists not elsewhere classified

Coverage:

- Until 2010: Includes practitioners working in medical institutions and medical residents (training in all specialised field, including family medicine).
 - From 2011: Includes practitioners and residents (training in relevant fields only, as described in the definition) working in medical institutions.
 - Includes laboratory medicine, rehabilitation medicine, nuclear medicine, preventive medicine physicians and Korean oriental medicine doctors who have specialised field.
- Break in time series: 2011. All medical residents are included in this category until 2010. From 2011 onwards, only residents training in the fields belonging to “other specialties” are included.

Latvia

Source of data:

- Since 2005: **Health Inspectorate of Latvia**; Medical Persons' Register.

Reference period: 31 December.

Coverage: Interns and residents are included, and classified according to the specialty in which they are training.

Generalist medical practitioners

Coverage:

- General practitioners (GPs) started to develop as speciality at the beginning of 90ties and grew rapidly until 2002. At the same time proportion of therapists and paediatricians is decreasing as they are re-qualifying to GP, thus fulfilling the functions of primary medical care (interns, GP and paediatricians).
- Interns and residents in general practice are included.
- The breakdown between General practitioners and Other generalist (non-specialist) medical practitioners is not available.

Medical group of specialists

Break in time series: 2019. There was a new allocation of certain doctors in 2019. Medical group of specialists include physical and rehabilitation medicine physicians, hepatologists, specialists of palliative care and forensic medicine experts since 2019. In previous years they were included in the group of other specialists.

Surgical group of specialists

Coverage: Specialists in maxillo-facial surgery, dental and oral surgery are excluded.

Other specialists not elsewhere classified

Break in time series: 2019. There was a new allocation of certain doctors in 2019. Other specialists include physical and rehabilitation medicine physicians, hepatologists, specialists of palliative care and forensic medicine experts until 2018. Afterwards they are included in the medical group of specialists.

Medical doctors not further defined

Coverage: All physicians have been classified into more specific categories; therefore 0 is entered for the whole time series since 2005.

Lithuania

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

Reference period: 31st December.

Coverage: Predominant area of practice is used as criterion to classify physicians by categories.

Break in time series: 2011.

- 2011: Since year 2011, interns and residents are included in the respective categories of physicians by specialties.
- In year 2010 and earlier, interns and residents were included in the category *Medical doctors not further defined*.

General practitioners

Coverage: Data include family doctors (general practitioners) and therapists in primary health care.

Other generalist (non-specialist) medical practitioners

Coverage: Data include medical doctors (general).

General paediatricians

Coverage: Data include paediatricians and neonatologists.

Other specialists not elsewhere classified

Coverage: Data include laboratory physicians, genetics physicians and physiology physicians.

Medical doctors not further defined

Coverage: Up to 2010, data include all residents as they cannot be classified by specialties. Since 2011, residents are included in respective categories of physicians.

Luxembourg

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Coverage:

Until 1999:

- Includes physicians working in administration and research.
- Retired physicians are not included. However, the end of activity of self-employed physicians is often noted with some time lag.

From 2000:

- Practising physicians.
- Doctors who do not work in direct contact with patients (laboratories, administration, R&D, etc) are excluded.

Break in time series: 2000.

Generalist medical practitioners, General practitioners

Coverage: Interns specialising in general practice in Luxembourg are included since 2000.

Psychiatrists

Coverage/Break in time series: Since 2005, psychiatry, neuropsychiatry and child psychiatry are included. Until 2004, only psychiatry is included.

Medical group of specialists

Coverage/Deviation from definition:

- The specialty "nephrology" is included within the medical group of specialties, as in Luxembourg nephrology is an internal medicine specialty.
- Physicians working in laboratories (such as microbiologists, pathologists and haematologists) are not included.

Surgical group of specialists

Deviation from the definition/Break in time series: Since 2014, stomatologists, dental and maxillofacial surgeons are included. Before 2014, they are included in 'other specialists not elsewhere classified'. Dentists are not included.

Other specialists not elsewhere classified

Break in time series: Since 2014, stomatologists, dental and maxillofacial surgeons are not included as they are counted in the surgical group of specialists. Before 2014, stomatologists, dental and maxillofacial surgeons are included. Dentists are not included.

Mexico

Source of data: **Ministry of Health**. Bulletin of Health Information and Statistics. National Health System, Vol. 1, "Human and material health resources" 1990 to 2002. For 2003 to 2019, data are taken from the National Health Information System (SINAIS). In the case of the private sector, for 2002 to 2019 the data are taken from the **National Institute of Statistics and Geography (INEGI)**. National Survey on Medical units with Inpatient Hospital Services.

Coverage:

- The data presented include public and private human resources from the health sector.
- In the case of private providers, personnel on the payroll and personnel in special agreement are included.
- Some double counting may occur as physicians can work in the public and private sector simultaneously.
- Information is presented as a head count.

General practitioners

Coverage:

- Since 2003, data include only general and family practitioners who have completed a basic medical university education and who have a professional license.
- From 1990 to 2002, data include also medical interns who have completed their university education in basic medical education and who are undertaking postgraduate clinical training. From 2003 onwards, these medical interns are reported in the category "Other generalist (non-specialist) medical practitioners".

Break in time series: 2003.

Other generalist (non-specialist) medical practitioners

Coverage: Data include medical interns who have completed their university education in basic medical education and are undertaking postgraduate clinical training. These data are available separately as of 2003 (they are included in General practitioners before 2003).

Psychiatrists

Break in time series: Data from the Ministry of National Defense (SEDENA) are included in 2003 only (259 psychiatrists). Data from the IMSS are not included in 2005-06 (about 244 per year).

Medical group of specialists

Coverage:

- Data include medical residents until 2002. Since 2003, medical residents are included in “Other specialists n.e.c.”.
- In 2001, the number of medical specialists decreased by 27% in the private sector.
- In 2005, there was a 50% increase in the number of specialists in the IMSS.

Break in time series: 2003.

Other specialists not elsewhere classified

Coverage: Since 2003, all medical residents are included in this category because this group cannot be broken down according to training specialty. (Before 2003, medical residents are included in the category “Medical group of specialists”.)

Netherlands

All categories

Source of data:

- From 1999 onwards: Data based on **BIG register** (register of (para) medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register). Physicians in training: **RGS** (Registratiecommissie Geneeskundig Specialisten: Registration committee medical specialists).

Reference period:

- Last Friday before Christmas.
- Physicians in training: 1 January of year t+1.

Coverage/Deviation from the definition: Data from 1999 to 2013 refer to professionally active physicians. From 2014 onwards, data refer to practising physicians, i.e. physicians who:

- are licensed to practice; and
 - live and work in the Netherlands. Their license requires that they have been practising in the past five years.
- Break in time series: 2014. As from 2014, a new method was adapted to physicians with a specialism and general practitioners. As the license register requires physicians to have been practising in the past five years, the sector of employment was not used anymore in the selection method. Research showed this was a better estimate for the required definition of practising physicians. The result is a slight increase in their numbers from 2014 onwards.

General practitioners

Source of data:

- 1980-1998: Practising GP's: **Netherlands Institute for research of Primary Health Care (NIVEL)**.
- From 1999 onwards: Data based on **BIG register** (register of (para) medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register).
- Doctors in training for GP, Physicians in training: **RGS** (Registratiecommissie Geneeskundig Specialisten: Registration committee medical specialists). Until 2009: **KNMG** (Royal Dutch Society for the Advancement of Medicine).

Reference period:

- 1980-1998: 1st January year t+1 is used for 31 December year T.
- From 1999 onwards: last Friday before Christmas.

- Physicians in training: 1 January of year t+1.

Deviation from the definition:

- Data up to 1998 refer to physicians licensed to practice.

- Data from 1999 to 2013 refer to professionally active physicians. Data refer to GP's who:

- are licensed to practice with the specialty "general practice";
- live and work in the Netherlands;
- for employees: are active in a health- or social care sector or a health-care related sector; or
- for self-employed GP's: are economically active (their license requires that they have been practising – not necessarily fulltime – in the past five years).

- List of NACE codes used for health- or social care and healthcare related sectors: NACE v1: 851, 853, 2441, 2442, 331, 5146, 5231, 5232, 5248.2 (opticians), 6022 (part of transport for healthcare), 6602.3, 6602.4 (pension funds part for healthcare occupations), 6603 (part of health insurance funds and companies), 7310.3 (medical and pharmacological research and development), 745 (temporary work companies; very important for nurses, caring personnel and physiotherapists), 7522 (Ministry of Defense, including military hospital), 7523.2 (part of medical personnel for prisons, including prison hospital), 753 (compulsory health care insurance, operations for exceptional medical expenses act), 8022, 8030, 9304, 9305.

- NACE v2: 86, 87, 88, 212, 266, 325, 4646, 4773, 4774, 4778.2, 4932, 6530.3, 6530.9, 6512, 7211.2 + 7219.3 (R&D for health, medical products or pharmaceutical processes), 782, (8412 will be included when NACE v2 is available in SSB; Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security), 8422, 8423.2, 843, 8532, 854, 9313, 9609.

- Data from 2014 refer to practising physicians. Data refer to GP's who:

- are licensed to practice with the specialty "general practice";
- live and work in the Netherlands. Their license requires that they have been practising in the past five years.

Break in time series: 1999, 2014.

Other generalist (non-specialist) medical practitioners

Source of data:

- Data for professionally active and licensed other generalist medical practitioners based on **BIG register** (register of (para)medical professions) and **SSB database** (micro-integrated database of Statistics Netherlands with data from the municipal register, tax register, social security, and business register).

Deviation from the definition: Data refer to generalist physicians who:

- are licensed to practice;
- live and work in the Netherlands;
- are active in a health- or social care sector or a health-care related sector.

Coverage: This group refers to "Arts niet in opleiding tot specialist" (Physician not in training for a specialty). This is calculated as a remainder: total active physicians minus all active physicians with a specialty (including GP's) minus all active physicians in training for a specialty.

Specialist medical practitioners (and sub-categories)

Source of data:

- Up to and including 1998: The **BIG register** (register installed by the Individual Health Care Professions Act), annual report (primary source: **KNMG, Medisch Specialisten Registratie Commissie** - Royal Dutch Society for the Advancement of Medicine, Medical Specialists Registration Commission).

- From 1999 onwards: Data based on **BIG register** (register of (para)medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register). Physicians in training: **RGS** (Registratiecommissie Geneeskundig Specialisten: Registration committee medical specialists).

Coverage/Deviation from the definition:

- Data up to 1998 refer to physicians licensed to practice.

- Data from 1999 to 2013 refer to professionally active physicians. Data refer to physicians who:

- are licensed to practice with the specialty;
- live and work in the Netherlands;
- for employees: are active in a health- or social care sector or a health-care related sector; or

- for self-employed physicians: are economically active (their license requires that they have been practising – not necessarily fulltime – in the past five years).
- List of NACE codes used for health- or social care and healthcare related sectors: NACE v1: 851, 853, 2441, 2442, 331, 5146, 5231, 5232, 5248.2 (opticians), 6022 (part of transport for healthcare), 6602.3, 6602.4 (pension funds part for healthcare occupations), 6603 (part of health insurance funds and companies), 7310.3 (medical and pharmacological research and development), 745 (temporary work companies; very important for nurses, caring personnel and physiotherapists), 7522 (Ministry of Defense, including military hospital), 7523.2 (part of medical personnel for prisons, including prison hospital), 753 (compulsory health care insurance, operations for exceptional medical expenses act), 8022, 8030, 9304, 9305.
- NACE v2: 86, 87, 88, 212, 266, 325, 4646, 4773, 4774, 4778.2, 4932, 6530.3, 6530.9, 6512, 7211.2 + 7219.3 (R&D for health, medical products or pharmaceutical processes), 782, (8412 will be included when NACE v2 is available in SSB; Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security), 8422, 8423.2, 843, 8532, 854, 9313, 9609.
- Data from 2014 refer to practising physicians. Data refer to physicians who:
- are licensed to practice with the specialty;
 - live and work in the Netherlands. Their license requires that they have been practising in the past five years.

Break in time series: 1999, 2014.

Surgical group of specialists

Coverage: Physicians with the specialty “emergency medicine” are included, although in The Netherlands these physicians are not surgeons.

Other specialists not elsewhere classified

Coverage: Categories included in The Netherlands data are: occupational medicine, insurance health, community health, clinical chemistry (formerly a specialty), rehabilitative care, nursing home physicians, and physicians for the mentally handicapped. Physicians with specialties like forensic medicine which require additional education for several years but are not officially recognized as a specialty in The Netherlands are also included.

Medical doctors not further defined

Coverage: Since 1999, all physicians have been allocated to specific groups of specialties.

New Zealand

Source of data: Estimated figures based on responses from the **NZ Medical Council Workforce Survey** and the number of doctors on the **NZ Medical Council Register**.

- Figures refer to practising physicians.
- The figures are an estimation of the actual number of generalist medical practitioners. The estimated figures were calculated by summing the number of doctors working four or more hours per week in medicine, divided by the survey response rate. The survey response rate was calculated by summing the number of survey respondents divided by the total number of registered doctors with an annual practicing certificate as at 31 March.
- Any type of activity (such as osteopathy, geriatric...) is included as long as the individual is working as a physician, GP or specialist.
- Stomatologists, osteopaths, geriatricians are included.
- The data include all physicians who work in NZ irrespective of their country of qualification or ethnicity. Doctors are included as part of the medical practitioner workforce either when they become graduates, in the seventh (or subsequent) year of working in medicine in New Zealand or when an overseas graduate receives provisional or full registration to work medically in New Zealand.
- To be included in the survey, the doctor has to be working four or more hours per week in medicine. However, medicine may not be his/her primary source employment; for example, he/she may teach.

Break in time series: 2010, 2014, 2015, 2020.

- 2010. In 2018, data have been revised back to 2010. In order to improve accuracy, the survey responses to ‘work type’ have been cross-referenced with reported ‘work role’. This has enabled to reduce the number of doctors not further defined.
- 2014. Change in methodology for data from 2014 onwards. Figures are based on responses from the NZ Medical Council Workforce Survey, adjusted for the response rate for that year, to give an estimate of the total workforce in

each category. In 2019, historical figures for 2014 to 2016 were adjusted to ensure consistency with 2017 and 2018 data.

- 2015. Change in methodology: The NZ Medical Council Workforce survey shifted from a mail to an online format. This transition has improved response rate and additionally potentially improved data accuracy.

- 2020. Up until 2019, the data were supplied to the Ministry of Health by the Medical Council. In 2020, they were calculated within the Ministry of Health using a combination of comprehensive register data and less comprehensive survey data. In 2019 the survey response rate was 78% and in 2020 it increased to 95%. Fully qualified specialists are identified in the registry data but those in training would only be identified by their response in the survey. Thus, the higher response in 2020 has allowed to allocate these trainees to their specialties rather than having to, in the absence of any information, assign them to the “Other generalists” category.

Generalist medical practitioners (and sub-categories)

Coverage:

- Definition of General Practitioners: GPs are the largest group of primary care practitioners.

- The following NZ workforce survey ‘work type’ categories have been used for this workforce indicator: General practice, Primary care, Accident and medical practice, and Rural Hospital Medicine.

- The NZMC advised moving “Accident and medical practice” from surgical to general practice as they believe that in the New Zealand setting, it has more in common with general practice than the surgical specialties. NZMC further advised that “Accident and medical practice” was not really a recognised definition prior to 2000. It would have been added to the survey around the same time that it was recognised as a vocational scope of practice. Doctors who were doing work in this area prior to 2000 would either have defined themselves as general practice, or as something else in the ‘surgical’ area, depending on the nature of what they were doing. The figures prior to 2000 for physicians in general practice have been removed since they are likely to be a slight undercount compared with the later definition post-2000 which includes physicians working in the “Accident and medical” vocational scope of practice.

General practitioners

Coverage: The following NZ workforce survey ‘work type’ categories have been used for this workforce indicator: General practice. The ‘work role’ of General Practitioner has also been included in this category.

Break in time series: 2020. Defined by main work type of General Practice only.

Other generalist (non-specialist) medical practitioners

Coverage: The following NZ workforce survey ‘work type’ categories have been used for this workforce indicator: Primary care, Accident and medical practice, and Rural Hospital Medicine. Doctors with an identified ‘work role’ of House Officer have been included in this category, regardless of their reported ‘work type’.

Break in time series: 2020. Work type of ‘Urgent Care’ now included, House Officers identified by the work type ‘House Officer Rotations’.

Specialist medical practitioners (and sub-categories)

Coverage: Specialists are defined as doctors who, by virtue of post-graduate training, examination and experience have been admitted to membership of a professional association of specialists.

General paediatricians

Coverage: The following NZ workforce survey ‘work type’ categories have been used for this workforce indicator: Paediatrics.

Obstetricians and gynaecologists

Coverage: The following NZ workforce survey ‘work type’ categories have been used for this workforce indicator: Obstetrics and Gynaecology.

Psychiatrists

Coverage: The following NZ workforce survey ‘work type’ categories have been used for this workforce indicator: Psychological medicine and psychiatry.

Medical group of specialists

Coverage:

- The following NZ workforce survey ‘work type’ categories have been used for this workforce indicator: Basic

medical science, Breast medicine, Clinical genetics, Dermatology, Diagnostic and interventional radiology, Family Planning, Internal medicine, Musculo-skeletal medicine, Occupational medicine, Ophthalmology, Palliative medicine, Pathology, Public health medicine & mgmt, Radiation oncology, Rehabilitation medicine, Sexual health medicine, Sports Medicine.

- The NZMC advised moving family planning, occupational medicine, and sports medicine to 'Medical Group of specialties' as they arguably 'non-surgically treat physical disorders and diseases' but are not general practitioners as they do limit their practice to certain diseases or methods of treatment.

Break in time series: 2020. Now also includes work types of 'Skin cancer' and 'Clinical Forensic Medicine'.

Surgical group of specialists

Coverage: The following NZ workforce survey 'work type' categories have been used for this workforce indicator: Anaesthesia, Emergency medicine, Intensive care medicine, Surgery: cardiothoracic, Surgery: general, Surgery: neurosurgery, Surgery: orthopaedic, Surgery: other, Surgery: otolaryngology, Surgery: paediatric, Surgery: plastic, Surgery: urology, Surgery: vascular.

Medical doctors not further defined

Coverage:

- The following NZ workforce survey 'work type' categories have been used for this workforce indicator: House officer rotations, Not recorded, Other.

- Medical Administration is excluded from the 'Medical doctors not further defined' category; therefore, the sum of physicians by category equals to the total provided for practising physicians.

- Both interns and residents are included in NZ figures for practising physicians. 'Interns' in New Zealand are generally understood to be doctors in their first year as a doctor following graduation who work under the overall supervision of an intern supervisor. After this initial year, they generally get a general scope of practice (full registration). The term 'residents' most closely matches doctors in vocational training in New Zealand.

- There is some fluctuation in the time series, based on survey data. The main causes of this fluctuation are changes in how doctors report their work type and in the number of doctors who choose not to provide further details around the type of work they are doing.

Break in time series: 2020. This category now consists just of doctors with the main work type of 'Other' ('House Officer Rotations' is grouped under 'Other generalist').

Norway

Source of data:

- From 2002: **Statistics Norway**; Register-based statistics on employment of health-care personnel. See <http://www.ssb.no/hesospers/en/>.

- For the years prior to 2002: The **Norwegian Medical Association** was the source for this information.

Reference period: 3rd week of November.

Coverage:

- Data on medical specialists are based on each physician's latest specialty. Each individual may have as many as three specialties, but only one of them is counted here.

- Interns and residents training for a specialty cannot be identified as specialists, and therefore are included in the category "Other generalist (non-specialist) medical practitioners".

Break in time series: 2002, 2009, 2015.

- The figures from 1993 and 1998 are the figures received from the Norwegian Medical Association and are not directly comparable with the figures from 2002 and onwards.

- Up to 2008, data include all personnel within HP1-HP3. From 2009, because of national registration and quality, it is also chosen to include physicians in HP4.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called "a-ordningen" (the a-system).

Generalist medical practitioners

Break in time series: 2008. From 2002 to 2007, data include only physicians specialised in general practice. From 2008, data include general practitioners and physicians specialised in general practice.

General practitioners

Coverage: Data on general practitioners are based on personnel fulfilling one of the following criteria:

- Occupation as general practitioner.
- Practising physicians with a general practice contract.
- Last specialisation in general practice.
- Personnel working in NACE 8621 (general medical practice) and where occupational data are missing.

Other generalist (non-specialist) medical practitioners

Coverage: Data on other generalist (non-specialist) medical practitioners are based on personnel fulfilling the following criteria:

- Non-specialists;
- Not classified as a general practitioner.

Poland

Source of data: **Ministry of Health, Ministry of Interior, Ministry of National Defence.**

Reference period: 31st December.

Note: Grade I and grade II specialisations were granted when the previous system was in force. Doctors, according to Polish law, could achieve this by September 1998. Obtaining a grade II specialisation is equivalent to the current title of specialist, but the grade I specialisation is not equivalent to the title of specialist and has no counterpart in the current system of specialised training.

General practitioners

Coverage: Physicians with grade II specialisation, physicians with title of specialist in family medicine or physicians undergoing training in this specialty.

Other generalist (non-specialist) medical practitioners

Coverage: Physicians with Grade I specialisation in any specialty, interns and physicians without specialisation.

General paediatricians

Coverage: Physicians with grade II specialisation or with title of specialist in general paediatrics or undergoing training in this specialty.

Obstetricians and gynaecologists

Coverage: Physicians with grade II specialisation or with title of specialist in obstetrics and gynaecology, clinical genetics or undergoing training in these specialties.

Break in time series: 2010. Before 2010, neonatologists were included in this category.

Psychiatrists

Coverage: Physicians with grade II specialisation or with title of specialist in psychiatry, children and youth psychiatry or undergoing training in these specialties.

Medical group of specialists

Coverage: Physicians with grade II specialisation or with title of specialist in internal diseases, allergology, angiology, audiology and phoniatrics, balneology and physical medicine, cardiology, clinical immunology, clinical oncology, clinical toxicology, dermatology and venereology, diabetology, endocrinology, forensic medicine, gastroenterology, geriatrics, gynecology oncology, haematology, hypertensiology, infectious diseases, lung diseases, medical microbiology, medical rehabilitation, neonatology, nephrology, neurology, neuropathology, nuclear medicine, oncological radiotherapy, oto-rhino-laryngology, palliative medicine, pathology, pediatric cardiology, pediatric neurology, paediatric oncology and haematology, paediatric oto-rhino-laryngology, occupational medicine, radiology and diagnostic imaging, rheumatology, sexology, sports medicine, transfusion medicine and transport medicine or undergoing training in these specialties.

Break in time series: 2010. Prior to 2010, nephrology was classified under “Surgical group of specialities” and neonatology under “General paediatricians”.

Surgical group of specialists

Coverage: Physicians with grade II specialisation or with title of specialist in: accident and emergency medicine, cardiac surgery, clinical transplantology, general surgery, intensive care and anaesthesiology, maxillo-facial surgery (excluding dentists with this specialisation), neurosurgery, ophthalmology, orthopaedics and traumatology of locomotor system, paediatric surgery, paediatric urology, plastic surgery, surgical oncology, thoracic surgery, urology, vascular surgery or undergoing training in these specialties.

Break in time series: 2010. Prior to 2010, nephrology was classified under “Surgical group of specialities”.

Other specialists not elsewhere classified

Coverage: Physicians with grade II specialisation or with title of specialist in: clinical pharmacology, epidemiology, laboratory diagnostics, public health or other rare specialties, or physicians undergoing training in these specialties.

Medical doctors not further defined

Data not applicable. All physicians were classified to more specific categories of physicians.

Portugal

Source of data: **Statistics Portugal** and the **Portuguese Medical Association**.

Reference period: 31st December.

Coverage:

- Head count data.
- Includes all physicians registered in the Portuguese Medical Association at the time of data collection, practising or not practising medicine, active or inactive.
- Physicians with more than one specialisation (e.g. General Practice and Paediatrics) will be counted twice.

Deviation from the definition:

- Data refer to physicians licensed to practice.
- It's not possible to determine the main area of practice of doctors, because data is provided to INE aggregated by municipality.
- Some physicians are licensed to practice in more than one specialty. These physicians are accounted in all specialties they have (e.g. physicians with specialisations in General practice and Paediatrics will be counted twice). Therefore the sum of physicians by categories is higher than the actual total number of physicians.

General practitioners

Coverage:

- In Portugal “General practice and family medicine” is a specialisation.
- The denomination for the physicians included in this category was/is:
 - from 1983 to 1995: Generalists (Generalistas);
 - from 1996 to 1998: General and Family Medicine (Medicina Geral e Familiar).
 - from 1999 onwards: General and Family Medicine (Medicina Geral e Familiar) and non-specialised physicians **not** working in hospitals (they work in primary health care, as family doctors, but they don't have the specialty “General and family medicine”).

Break in time series: 1999.

Other generalist (non-specialist) medical practitioners

Coverage: Until 1998, data include non-specialised physicians and medical interns without any area of specialisation. Since 1999, data include only those working in hospitals.

Break in time series: 1999.

General paediatricians

Coverage: Paediatricians.

Obstetricians and gynaecologists

Coverage: Obstetricians, Gynaecologists and more recently also Geneticists.

Psychiatrists

Coverage: Psychiatrists, Child / Paediatric Psychiatrists.

Medical group of specialists

Coverage: Medical group of specialties includes: Histopathology/Pathological Anatomy, Cardiology, Paediatric cardiology, Dermatovenereology, Infectious diseases, Endocrinology and nutrition, Gastro-enterology, Immunoallergology, Immunohemotherapy, Clinical pharmacology and therapeutics <https://www.ordemosmedicos.pt/?lop=conteudo&op=eae27d77ca20db309e056e3d2dcd7d69>, Haematology <https://www.ordemosmedicos.pt/?lop=conteudo&op=7eabe3a1649ffa2b3ff8c02ebfd5659f>, Internal medicine, Legal medicine/Forensics, Nuclear medicine, Tropical medicine, Neurology, Neuroradiology, Medical oncology, Otorhinolaryngology, Clinical pathology, Pneumology/Respiratory medicine, Radiodiagnostic/Clinical radiology, Radiotherapy/Clinical oncology, Rheumatology, Occupational medicine and (since 1992) Public health.

Surgical group of specialists

Coverage: Surgical group of specialties includes: Anaesthetics, Angiology and vascular surgery, Cardio-thoracic surgery <https://www.ordemosmedicos.pt/?lop=conteudo&op=cfecdb276f634854f3ef915e2e980c31>, General surgery, Paediatric surgery <https://www.ordemosmedicos.pt/?lop=conteudo&op=bd686fd640be98efaae0091fa301e613>, Plastic surgery <https://www.ordemosmedicos.pt/?lop=conteudo&op=a597e50502f5ff68e3e25b9114205d4a>, Renal medicine, Neurosurgery, Ophthalmology, Orthopaedics, Urology and Cardiac Surgery and Thoracic Surgery.

Other specialists not elsewhere classified

Coverage: Other specialties include: Sports medicine <https://www.ordemosmedicos.pt/?lop=conteudo&op=69adc1e107f7f7d035d7baf04342e1ca>, Physical and rehabilitation medicine.

Medical doctors not further defined

- Data not applicable.

Slovak Republic

Data not available. (Suitable data source for providing indicators is under development.)

Slovenia

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage:

- The National Health Care Providers Database is a registry with total (100 %) coverage of health workers.
- Data refer to practising physicians.

General practitioners

Coverage: Includes the following medical specialties: General medicine, Family medicine.

General paediatricians

Coverage: Includes the following medical specialties: Paediatrics, School medicine.

Obstetricians and gynaecologists

Coverage: Includes the following medical specialties: Gynaecology and obstetrics.

Psychiatrists

Coverage: Includes the following medical specialties: Psychiatry, Neuro-Psychiatry, Child and adolescent psychiatry.

Medical group of specialists

Coverage: Includes the following medical specialities: Internal medicine, Communicable diseases (infectology), Neurology, Dermatovenereology, Otorhinolaryngology, Transfusion medicine, Physical and rehabilitation medicine, Radiology, Oncology with radiotherapy, Nuclear medicine, Pathology, Forensic medicine, Medical microbiology, Occupational, traffic and sports medicine, Clinical microbiology, Hematology, Rheumatology, Gastroenterology, Internal oncology, Nephrology, Pneumology, Child neurology.

Surgical group of specialists

Coverage: Includes the following medical specialities: General surgery, Orthopaedic surgery, Ophthalmology, Anaesthesiology, Intensive medicine, Emergency medicine, Thoracic surgery, Traumatology, Urology, Neurosurgery, Cardiovascular surgery, Plastic, reconstructive and aesthetic surgery, Abdominal surgery, Oral surgery, Maxillo-facial surgery.

Other specialists not elsewhere classified

Coverage: Includes the following medical specialities: Epidemiology, Hygiene, Social medicine, Medical biochemistry, Public health medicine, Clinical genetics, Clinical psychology.

Medical doctors not further defined

Coverage: Includes the following medical specialities: Orthodontics, Child and preventive dentistry, Dental prosthetics, Endodontics, Parodontology.

Spain

Generalist medical practitioners, General practitioners

Source of data: **Ministry of Health**. From **Primary Care Information System (SIAP)**.

<https://www.mscbs.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/siap.htm>.

Reference period: 31st December.

Coverage:

- Data include number of persons who work in health care centres of National Health System at the end of the calendar year. Data for private sector are not available.
- Included: Interns and residents who are training to become GPs (3 years is required to qualify as GP; before 2005/2006, it used to be 4 years).
- Since 2018, data also include doctors who work in urgent primary care.

Break in time series: 2018.

Specialist medical practitioners and sub-categories (except General paediatricians: see below)

Source of data:

- Up to 2009: **Ministry of Health**, from **Statistics on Health Establishments Providing Inpatient Care (ESCRI)**.

<https://www.mscbs.gob.es/estadEstudios/estadisticas/estHospInternado/inforAnual/homeESCRI.htm>.

- Since 2010: **Ministry of Health**, from **Specialised Care Information System** (Sistema de Información de Atención Especializada - SIAE).

- Since 2012 (for ***Surgical group of specialists*** only): **Ministry of Health**, from **Specialised Care Information System** (Sistema de Información de Atención Especializada - SIAE) and from **Primary Care Information System** (Sistema de Información de Atención Primaria - SIAP).

- Since 2018 (for ***Other specialists elsewhere classified*** only): **Ministry of Health**, from **Specialised Care Information System** (Sistema de Información de Atención Especializada - SIAE) and from **Primary Care Information System** (Sistema de Información de Atención Primaria - SIAP).

<https://www.mscbs.gob.es/estadEstudios/estadisticas/estHospInternado/inforAnual/homeESCRI.htm>

<https://www.mscbs.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/siap.htm>

Reference period: 31st December.

Coverage:

- All public and private hospitals in Spain are included. Specialised out-patient clinics depending on a general hospital (National Health System) are also included.
- Number of physicians employed in hospital.
- Doctors in training (interns and residents) are included in each specific sub-category since 2010 (until 2009, all

doctors in training are included in the category “Other specialists n.e.c.”).

Deviation from the definition: Data on specialists refer only to physicians working in hospital. Hence the sum of physicians by categories does not correspond to the total number of physicians.

Break in time series: 2010, 2012, 2018.

- Before 2010, all physicians in training (interns and residents) are included in “Other specialists n.e.c.”. From 2010 onwards, interns and residents are allocated in the specialty in which they are training.
- Until 2009 Family practitioners in training in hospital are included (in “Other specialists n.e.c.”). Since 2010 Family practitioners in training in hospital are excluded.
- Since 2012, data also include doctors who work in accident and emergency medicine out of hospitals (urgency and emergency 112/061), reported in Surgical group of specialists.
- Since 2018, data also include doctors who work in homecare palliative support, reported in Other specialists elsewhere classified.

Psychiatrists

- Child psychiatrists are included.

Medical group of specialists

Break in time series: 2010.

- Radiologists are included since 2010. (They are included in the category “Other specialists n.e.c.” with labs, pathologists and doctors in training until 2009).
- Oto-rhino-laryngologists are included since 2010. (They are included in the “Surgical group of specialists” until 2009).

Surgical group of specialists

Coverage:

- Data refer to specialists working in hospitals. Since 2012, data also include doctors who work in accident and emergency medicine out of hospitals (urgency and emergency 112/061).
- Includes Oto-rhino-laryngology until 2009. (Oto-rhino-laryngologists are included in the “Medical group of specialists” since 2010).

Break in time series: 2010 and 2012.

Other specialists not elsewhere classified

Coverage:

- Data include the specialties “clinical analysis”, “biochemistry” and “rehabilitation”. Since 2018, data also include doctors who work in homecare palliative support.
- Doctors in training (interns and residents) are included until 2009. Some doctors in training are still included since 2010 (Biochemistry, Clinical Pharmacology, Clinical Analysis and Physical Medicine - Rehabilitation).

Break in time series: 2010, 2018.

- Before 2010, all physicians in training (interns and residents) are included in “Other specialists n.e.c.”. From 2010 onwards, interns and residents are allocated in the specialty in which they are training.
- Until 2009 Family practitioners in training in hospital are included. Since 2010 Family practitioners in training in hospital are excluded.
- Radiologists are included in “Other specialists n.e.c.” until 2009. (Since 2010, they are included in “Medical group of specialists”.)

General paediatricians

Source of data:

- **Ministry of Health**, from **Primary Care Information System (SIAP)**.
<https://www.mscbs.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/siap.htm>.
- **Ministry of Health**, from **Specialised Care Information System (Sistema de Información de Atención Especializada - SIAE)**, since 2010 only.
<https://www.mscbs.gob.es/estadEstudios/estadisticas/estHospiInternado/inforAnual/homeESCRI.htm>

Reference Period: 31st December.

Coverage:

- Up to 2009: Data include number of persons who work in health care centres of National Health System that operate as general practitioners for children between 0 and 14 years. Before 2010, interns and residents are not

included.

- Since 2010: Data include number of persons who work in health care centres of the National Health System that operate as general practitioners for children between 0 and 14 years + number of persons who work in hospitals + interns and residents in training in this specialty.

Break in time series: 2010. Since 2010 data include paediatricians and medical interns and residents specialising in paediatrics working in a hospital (public and private).

Sweden

Source of data: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- Physicians include all persons with a Swedish physician's license and native-trained pre-licensed physicians employed within the health-care sector.
- Foreign-trained physicians without a Swedish license are not registered as physicians when undertaking clinical training as part of the licensing process. They are therefore not included in employment data.
- 100% coverage for licensed practising physicians until year 2018.
- The entire time series has been revised in 2021.

Generalist medical practitioners (and sub-categories)

Coverage:

- General practitioners include all physicians employed within the health-care sector whose latest specialist competence is in family medicine.
- All generalist practitioners must be specialized.

Specialist medical practitioners (and sub-categories)

Coverage: Specialists include all physicians employed within the health-care sector possessing a specialist competence (excluding competence in family medicine).

Medical doctors not further defined

Coverage: Data include pre-licensed native-trained physicians during training, but not pre-licensed foreign-trained physicians during training.

Switzerland

Source of data: **FSO Federal Statistical Office**, Neuchâtel; **Swiss Medical Association (FMH)**, Bern; medical statistics of physicians; yearly census.

Coverage/Break in time series: 2008. Until 2007, the data refer to professionally active physicians. Since 2008, the data refer to practising physicians.

Deviation from the definition:

- The data refer to professionally active physicians until 2007.
- Interns and residents are not included until 2007. Since 2008, physicians in training are reported in "Medical doctors not further defined" (data on physicians in training are not available by categories).

Generalist medical practitioners

Coverage:

- Data also include "practitioner medical doctors", to be understood as GPs without FMH postgraduate qualification (specialisation).
- The breakdown between "General practitioners" and "Other generalist (non-specialist) medical practitioners" is not available.

Deviation from the definition: Interns and residents are not included.

Break in time series: 2011. Since 2011, former specialists in internal medicine are registered in one single category under "Generalist medical practitioners", according to the Swiss medical association.

Note: The strong rise in the number of GPs in years 2002 and 2003 is chiefly the result of the application of the free movement of persons (agreement with the EU) to health professions, especially concerning the recognition of

foreign titles and subsequent modification of rules for applying for titles.

Specialist medical practitioners (and sub-categories)

- The last obtained specialty was used as criteria for categorising doctors with more than one specialty.

Deviation from the definition: Interns and residents are not included.

Specialist medical practitioners, Medical group of specialists

Break in time series: 2011. Since 2011, former specialists in internal medicine are not registered under medical specialists but in one single category under Generalist medical practitioners, according to the Swiss medical association.

Medical doctors not further defined

Coverage: No data on physicians in training by categories are available. Therefore, physicians in training are included in “Medical doctors not further defined” since 2008. Good global estimates of physicians completing their postgraduate medical education (resident medical officers) in training and specialising to become recognised GPs or specialists from the FMH (Swiss Medical Association) are 6913 physicians in 2008 and 6421 in 2009.

Break in time series: 2011.

Turkey

Generalist medical practitioners (and sub-categories)

Source of data:

- From 2000 onwards: **General Directorate for Health Services, Ministry of Health.**

- Up to 1999: **Health Statistics Yearbook - Ministry of Health.**

Coverage:

- Up to 1999: Data include physicians working in public or university administration. General Practitioners (who are physicians without any specialty education) and all medical residents are included among generalist medical practitioners.

- From 2000 to 2005: Only number of GPs (physicians without any specialty education) in MoH, university and private sector. Medical residents are not included, which explains the sharp decrease in data between 1999 and 2000.

- From 2006 onwards: Data include MoH, university, private sector and others (other public establishments and local administrations). MoND-affiliated facilities are included since 2012.

- Since 2006, the number of generalist medical practitioners in Turkey contains GPs, family physicians and family medicine residents. They may work both in primary care and hospitals.

- A GP is a general practitioner in medicine who has had 6-year basic medical education. GPs are physicians without any specialty education.

- A Family Physician (Doctor) is a medical professional who received 3-year Family Medicine residency training after graduation from a 6-year medical faculty.

- A Family Medicine Resident (Assistant) is a medical professional who is undergoing a 3-year Family Medicine residency training after graduation from a 6-year medical faculty.

- GPs and family physician specialists acting as managers are also included.

Deviation from the definition:

- Data refer to professionally active physicians.

- The breakdown between General practitioners and Other generalist (non-specialist) medical practitioners is not available. Hence all generalist medical practitioners are reported in the category “General practitioners”.

Break in time series: 2000, 2006 and 2018.

- 2000 and 2006 (see above).

- In 2018, the used database for health personnel has been changed. This new source keeps the data as person-based. Health personnel data were collected from health facilities as health facility-based before 2018.

Specialist medical practitioners (and sub-categories)

Source of data:

- From 2013 onwards: **General Directorate for Health Services, Ministry of Health.**

- Up to 2013: **General Directorate for Health Services, Ministry of Health and ESPC Higher Education Statistics.**

Coverage:

- Data include Paediatricians, Obstetricians and gynaecologists, Psychiatrists, Medical specialists, Surgical specialists and Medical interns or residents training for a specialty.
- Ministry of Health, university, private and other sectors (other public establishments, local administrations and since 2012 MoND-affiliated facilities) are included.
- From 2000 to 2005, the number of specialist medical practitioners includes all medical residents. Since 2006, family medicine residents are included under generalist medical practitioners, and the other medical residents are reported according to their specific specialty.

Deviation from the definition: Data refer to professionally active physicians.

Break in time series: 2000, 2018.

- The strong increase in 2000 is partly due to improvement in registration.
- Medical residents are included since 2000 (before 2000, they are reported under generalist medical practitioners).
- In 2018, the used database for health personnel has been changed. This new source keeps the data as person-based. Health personnel data were collected from health facilities as health facility-based before 2018.

General paediatricians

Coverage: Data include general paediatric specialists and medical residents of paediatrics in all health care facilities.

Obstetricians and gynaecologists

Coverage: Data include obstetrics and gynaecology specialists and medical residents of obstetrics and gynaecology in all health care facilities.

Psychiatrists

Coverage: Data include psychiatry specialists and medical residents of psychiatry in all health care facilities.

Medical group of specialists

Coverage:

- Data include medical specialists and medical residents of these branches in all health care facilities.
- Physical treatment and rehabilitation specialists and residents are included in the internal medicine category.

Surgical group of specialists

Coverage:

- Data include surgical specialists and surgical residents of these branches in all health care facilities.
- Specialties are: General surgery, Neurological surgery, Plastic surgery, Ophthalmology, Orthopaedics, Thoracic surgery, Cardiovascular surgery, Intensive care & anaesthesiology, Urology, and Accident and emergency medicine.

Other specialists not elsewhere classified

Coverage: Specialist physicians and medical residents who cannot be classified elsewhere and whose branches are not known are put into this group.

Medical doctors not further defined

- Data not applicable.

United Kingdom

Generalist medical practitioners (and sub-categories)

Source of data:

- **England:** For General Practitioners (GPs), the sources are:
 - * Up to 2014: NHS Digital, General & Personal Medical Services Statistics: <http://content.digital.nhs.uk/home>.
 - * 2015 onwards: Primary Care Workforce Tool. (Data as at 30 September each year). Data have been revised for all years. GP Retainers are now included for all years where they were previously excluded.
- **Scotland:** Information Services Division, Scottish Workforce Information Standard System, GP Contractor Database.
- **Wales:** Welsh Government: <http://gov.wales/statistics-and-research/?topic=Health+and+social+care&lang=en>.

- **Northern Ireland:** General Practitioners from Medlist, Business Services Organisation, General Medicine hospital doctors from Human Resource Management System, Department of Health, Social Services & Public Safety.

Reference period: Data as at 30th September.

Coverage:

- Does not include private sector.

- **Scotland:** Headcount includes Performer, Performer Salaried, Performer Registrar (GPs in training) and Performer Retainees. Data excludes locum staff.

- **Northern Ireland:** Includes estimates of General Medicine doctors practising in hospitals, excluding Hospital/Medical practitioner grade, Research Fellows and Clinical Assistants. The UK equivalent of interns and residents, i.e. foundation doctors and registrars, will be included in this data. Data for 2013 is not available due to the phased implementation of a new human resources IT system.

Deviation from the definition:

- **Scotland:** The sum of GPs and specialists is greater than the total number of physicians due to some staff holding more than one post. There is currently no conventional way of assigning such staff to one group only.

Estimation method:

- **Northern Ireland:** Hospital doctors with a department code of 'General Medicine' have now been included and figures from 2000 have been revised in 2011.

- **Northern Ireland:** 2013 data remain unavailable and continue to be an estimate of 2012. The data are unavailable due to the introduction of a new HR system in 2013.

Break in time series: 2015.

- **England:** The break in 2015 relates to a change in the collection methodology: GP data changed from an annual census collection to a quarterly collection from the Primary Care Workforce Tool (PCWT).

General practitioners

Deviation from the definition: Data include general practitioners and other generalists/non-specialists.

Other generalist (non-specialist) medical practitioners

- Data not available (GPs and Other Generalist Medical Practitioners cannot be separated).

Specialist medical practitioners (and sub-categories)

Source of data:

- **England:** The sources are:

* Hospital and Community Health Services (HCHS) Doctors. 2000-2008: NHS Digital, Medical & Dental Workforce Census, <http://content.digital.nhs.uk/home>; 2009 onwards: NHS Hospital & Community Health Service (HCHS) workforce statistics. (Data as at 30 September each year). Data from 2009 are headcount.

* Ophthalmic Medical Practitioners (OMPs). 2000-2019: Ophthalmic Workforce Data. (Data as at 31 December each year).

- **Scotland:** Information Services Division, Scottish Workforce Information Standard System. . From 2021, NHS Education for Scotland: Scottish Workforce Information Standard System.

- **Wales:** Welsh Government: <http://gov.wales/statistics-and-research/?topic=Health+and+social+care&lang=en>.

- **Northern Ireland:** Department for Health, Social Services and Public Safety:

http://www.dhsspsni.gov.uk/index/stats_research.

Reference period: Data as at 30th September, unless otherwise stated.

Coverage:

- Does not include private sector.

- **Northern Ireland:** Data exclude bank staff, research fellows, clinical assistants and hospital/medical practitioners. Data from 2000 exclude staff on career breaks. The UK equivalent of interns and residents, i.e. foundation doctors and registrars, will be included in this data. Data for 2013 is not available due to the phased implementation of a new human resources IT system.

- **Scotland:** Data excludes locum staff.

Deviation from the definition:

- **Scotland:** The sum of GPs and specialists is greater than the total number of physicians due to some staff holding more than one post. There is currently no conventional way of assigning such staff to one group only.

- **England:** Ophthalmic Medical Practitioners (OMPs) represent a headcount so each OMP is one individual, but the Hospital and Community Health Services (HCHS) portion of the Specialist Medical Practitioners for 2010-2012 are Rolecount - so some individuals may have more than one role (i.e in several hospital trusts). Rolecount data are

slightly larger than headcount figures.

Estimation method:

- **Northern Ireland:** Department code has been used as an approximation of specialty.
- **Wales:** 2006 - With the exception of GP data, these data have been estimated by applying the proportional breakdown from 2005 and 2007 to the 2006 total.
- **Northern Ireland:** 2013 data remain unavailable and continue to be an estimate of 2012. The data are unavailable due to the introduction of a new HR system in 2013.

Break in time series: 2009.

- **England:** The break in 2009 relates to a change in the collection methodology: HCHS data changed from an annual census collection to monthly workforce statistics from the Electronic Staff Record (ESR).
- **England:** Up to 2008, data are based on rolecount; since 2009, they are based on headcount.

Note:

- **England:** As of 2009, based on the new method providing headcount of doctors, the number of 'Specialist medical practitioners' is lower than the sum of the sub-specialties. Some doctors with more than one specialty could be reported in several sub-groups, however they would be counted once only in 'Specialist medical practitioners'. This results in a mismatch between the total specialties and the sum of sub-specialties.

Medical doctors not further defined

Data not applicable.

United States

Source of data: **American Medical Association (AMA)**/Physician Characteristics and Distribution in the US, 2019 and earlier editions. AMA Physician Masterfile unpublished data for 2014 and later. Used with the permission of AMA. <http://www.ama-assn.org/>.

Coverage:

- All physicians by self-designated specialty and activity, including members and non-members of the AMA and graduates of foreign medical schools who are in the United States and meet educational standards for recognition as physicians.
- Medical interns and residents are included in 'Other specialists not elsewhere classified' category.
- Included physicians must be currently engaged in patient care or other professional activity for a minimum of 20 hours per week.

Deviation from the definition: Data match OECD definition.

Calculation methods: Calculation methods match OECD definition.

Estimation method: Annual census.

Break in time series: Changes in definitions in 2003.

- From data year 2003, data include Federal and non-Federal physicians.

Generalist medical practitioners, General practitioners

Coverage: Based on AMA guidelines, general practitioners in U.S. include all general practitioners/family medicine doctors dedicated to patient care: office based physicians, residents/fellows, and physician staff. Estimates exclude other generalist medical practitioners (i.e. physicians who work in other professional activity such as administration, medical teaching, research, and other activities that are not related to patient care).

General paediatricians

Coverage: Includes doctors in general pediatrics and pediatric subspecialties. Estimates exclude Paediatric specialties (e.g. child psychiatry, child/paediatric surgery, child/paediatric gynaecology, paediatric cardiology, paediatric oncology, etc.)

Obstetricians and gynaecologists

Coverage: Includes doctors in obstetrics and gynecology and Ob-gyn subspecialties.

Psychiatrists

Coverage: Includes doctors in psychiatry and child psychiatry. Estimates exclude psychologists.

Medical group of specialists

Coverage: Includes doctors in allergy and immunology, cardiovascular disease, dermatology, gastroenterology, internal medicine, pediatric cardiology, and pulmonary disease.

Deviation from the definition: Data do not include doctors who specialise in radiology.

Surgical group of specialists

Coverage: Includes doctors in colon and rectal surgery, general surgery, neurological surgery, ophthalmology, orthopedic surgery, otolaryngology, plastic surgery, thoracic surgery, and urology.

Deviation from the definition: Data do not include doctors who specialise in anaesthesiology.

Other specialists not elsewhere classified

Coverage: For U.S., AMA identified other specialists not elsewhere classified as doctors in aerospace medicine, anatomic/clinical pathology, anesthesiology, diagnostic radiology, emergency medicine, forensic pathology, general preventive medicine, medical genetics, neurology, nuclear medicine, occupational medicine, other specialty, physical medicine and rehabilitation, public health and general preventive medicine, radiation oncology, radiology, transplant surgery, unspecified, and vascular medicine.

Deviation from the definition: Data include doctors who specialise in radiology and anaesthesiology.

Medical doctors not further defined

- Data not applicable.

NON-OECD ECONOMIES

Brazil

Source: The World Health Organization (WHO), Global Health Observatory (GHO), Indicators “Generalist medical practitioners” and “Specialist medical practitioners.”

https://apps.who.int/gho/data/node.main.HWFGRP_0020?lang=en (accessed June 2021).

Further information: <https://www.who.int/data/gho>.

Indonesia

Source: The World Health Organization (WHO), Global Health Observatory (GHO), Indicators “Generalist medical practitioners” and “Specialist medical practitioners.”

https://apps.who.int/gho/data/node.main.HWFGRP_0020?lang=en (accessed June 2021).

Further information: <https://www.who.int/data/gho>.

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