Other health service providers employed in hospitals

**Inclusion**
- Dentists
- Pharmacists
- Physiotherapists
- Psychologists
- Dieticians
- Audiologists and speech therapists
- Laboratory assistants
- Other health professionals and associate professionals

**Sources and Methods**

**Australia**

Source of data:
FTE data:
- Australian Bureau of Statistics. Private hospitals, Australia. ABS Cat. No. 4390.0. Canberra; ABS.

Coverage:
- Since 2005: Data are FTEs for diagnostic and other allied health professionals in public and private, acute and psychiatric hospitals.
- Up to 2004: FTEs for diagnostic and other allied health professionals in public hospitals (for private hospitals the FTEs for diagnostic and other allied health professionals are counted with physicians).
- Years reported are financial years 1 July to 31 June (e.g. 2006-07 is reported as 2006).


**Austria**

Source of data: Austrian Federal Ministry of Health, Hospital Statistics.
Reference period: 31 December.

Coverage and deviation from the definition:
- **Head counts**: Data include only physiotherapists, ergotherapists, dietitians, audiologists, speech therapists, laboratory assistants, and radiological assistants employed in hospitals (HP.1).
- **FTE**: Complete; data include the professions listed in “Head counts”, plus all other health professionals (e.g. pharmacists) employed in hospitals (HP.1).

**Belgium**

Source of data: SPF Santé publique - Service comptabilité des hôpitaux.
Reference period: 31st December.

**Canada**

Coverage:
- Selected categories of the National Occupational Classification (NOC) 2011 and category 622 (Hospitals) of the North American Industry Classification System (NAICS) 2007.
- Data include:
  - 3113 Dentists;
  - 312 Optometrists, chiropractors and other health diagnosing and treating professionals;
  - 313 Pharmacists, dietitians and nutritionists;
  - 314 Therapy and assessment professionals (3141 Audiologists and speech-language pathologists, 3142 Physiotherapists, 3143 Occupational therapists and 3144 Other professional occupations in therapy and assessment);
  - 32 Technical occupations in health (321 Medical technologists and technicians (except dental health), 322 Technical occupations in dental health care, 323 Other technical occupations in health care).
- Data exclude:
  - 3213 Animal health technologists and veterinary technicians.

Chile

Source of data: Ministry of Health. The original source is the National Health Human Resources Information System of the Public Sector.
Coverage: All Public Hospitals.
- Data include only the public sector. It is not yet possible to report data on hospital employment in the private sector. The public sector attends almost 80% of the Chilean population.
- Primary Health Care which belongs to the public health sector is excluded.
Estimation method: FTE is calculated on a weekly base of 44 hours (Chilean norm).
Deviation from definition: Service contracts with non-employed health professionals are not included in these data.

Czech Republic

Source of data: Institute of Health Information and Statistics of the Czech Republic. Annual report on health personnel.
Reference period: 31st December.
Coverage:
- Providers: Hospitals and specialised therapeutic institutes (excluding balneologic institutes, convalescence homes for children, institutes for long-term patients and hospices).
- Professions: dentists, pharmacists, paramedical workers with professional qualifications (excluding nurses and midwives), paramedical workers with professional and specialised qualifications, health care workers pursuing paramedical profession under professional supervision or direct guidance (excluding auxiliary nurses) and other professional workers in health care.
- Measurement units: head counts (employees on payroll and employers), FTE (employees on payroll, employers and contractual workers).
- In 2014, complete data are not available. Estimate is calculated from available data for 2014 and data from 2013.

Denmark

Source of data:
- Head counts: The Danish Health Authority, Labour Register for Health Personnel.
- FTE: The joint municipal payroll data office (KRL).
Reference period:
- Head counts: 31st December. Data show the number for January first the following year.
- FTE: yearly average.
Coverage: Only public section of health staff is included.
Note: FTE figures are based on the employee’s job description, while head counts figures are based on employee’s education.
Estonia

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

**Reference period:**
- Since 2013: November.

**Coverage:** For 2006-2010, the head count distribution is made according to their main occupational activity.

**Break in time series:** 2012.
- From 2012, the number of practising nurses does not include radiology nurses. Radiology nurses (by job specification - same as radiology technicians) are classified in the category of other health service providers.
- From 2012 assistant physicians (students), assistant nurses (students), assistant midwives (students) and assistant radiology technicians (students) who have no medical speciality are included. Before 2012 these data were not collected.

**Break in time series:** 2013.
- 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 an occupation with the highest workload.

Finland

**Source of data:** THL Health Personnel Statistics; **National Institute for Health and Welfare**. The data are based on the Employment Register kept by Statistics Finland.

**Reference period:** Data refer to information for the whole year.

**Coverage:** Data include caring personnel active in health care in Finland.

**Break in time series:** 2007 due to a change in the classification of economic activities.

France

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

**Reference period:** 31st December.

**Coverage:**
- Data refer to metropolitan France and D.O.M. (overseas departments).
- Data include the service contracts with non-employed medical staff.

**Estimation method:**
- From 2000 onwards, FFI-DIS pharmacists and odontologists have been estimated based on their ratios in total FFI-DIS over 1994-1999.
- Until 2008, fixed-term contracts were not counted in the head count nor in the FTE. Only the paid monthly average FTE is known. The FTE of fixed-term contracts are estimated by the paid monthly average FTE. Head counts cannot be estimated.
- FTE of self-employed medical personnel is not available, but the head count of the self-employed is known. The FTE are estimated from head counts by applying conventional calculating rules according to the working time of the self-employed.

**Break in time series:**
- From 2009 onwards, head counts of fixed-term contracts are also included for the non-medical staff. Previously only head counts of rolling contracts and holders and trainees of the public service were counted.
- From 2011 onwards, the number of persons employed in nursing structures or in nurses and midwives schools legally depending on hospitals are not counted.
- From 2013, the number of geographical establishments for all sectors (public and private) is counted. The number of hospital persons employed is clearly less impacted by the recast than the number of hospitals. Nonetheless, in this recast, the change of the unit surveyed results in a better quality of data collected in general (less double counting than before), so that the quality of data for the number of persons employed can be marginally improved.

Germany

**Source of data:** Federal Statistical Office, Health Care Personnel 2016; special calculation by the Federal Statistical
Reference period: 31st December.

Coverage:
- Data contain the number of other health professionals (e.g. dentists, physiotherapist, laboratory assistants, emergency medical assistants) working in hospitals including students who have not yet graduated.
- Included are health professionals employed in general hospitals, mental health hospitals and prevention and rehabilitation facilities in all sectors (public, not-for-profit and private).
- From 2000 onwards data from Health Care Personnel have been completely revised. Therefore comparable data before 2000 is not available. Data are rounded to the nearest thousand.

Estimation method: The number of FTE is calculated by adding the full and appropriate proportion of part-time occupied employees. FTE are measured by the number of hours of a standard labour contract.

Greece

Source of data: Hellenic Statistical Authority (EL.STAT.).
Reference period: 31st December.
Coverage: The number of other health professionals employed by hospital includes: pharmacists, physics and radiophysics, psychologists, laboratory assistants, physiotherapists, occupational therapists, and dieticians.

Hungary

Source of data: Hungarian Central Statistical Office. “Report on personnel of health service” per ICHA-HP categories: 1.1(General hospitals); 1.2 (Mental health and substance abuse hospitals); 1.3 (Specialty hospitals).
Reference period: 31st December.

Iceland

Source of data: The Ministry of Finance.
Reference period: December each year.

Ireland

Source of data: HR Management Information, Health Service Executive.
Reference period: 31st December.
Coverage:
- Data refer to publicly funded acute hospitals only. All employees under the aegis of Acute Services are included.
- Other Staff taken to be Total Staff less those listed separately.
- Historical data have been restated to cover re-structured health service configuration. Some years' data may remain unchanged.

Israel

Source of data: The data are based on the Labour Force Survey which is conducted routinely by the Central Bureau of Statistics and includes persons who had worked for at least one hour during the week before the survey, for pay, profit or other consideration.
Coverage: "Other health service providers employed in hospital” includes dentists, pharmacists, other academic health professionals (as dieticians, physiotherapists, audiologists and speech therapists and other therapists), laboratory assistants, CAM therapists and other health professionals and associate professionals.

Estimation method:
- The data are subject to variations due to sample errors and wide confidence intervals.
- Full-time equivalents (FTE) was measured by the number of hours actually worked by health personnel divided by the average hours worked in full-time jobs in Israel.

Break in time series:
- From January 2012, the Central Bureau of Statistics has made a transition from a quarterly system of measuring labour force characteristics to a new and improved system that better suits the latest international recommendations.
on employment and unemployment - Monthly Labour Force Survey. Therefore the 2012 data refer to the entire labour force (including the military service) and not to the civilian labour force, as it was before.

- In addition to the transition to a monthly survey, in 2012 a new Standard Industrial Classification of Economic Activities based on ISIC was implemented as well as a new Standard Classification of Occupations based on ISCO-08. The numbers for 2012 are still reported according to the previous classifications, but the numbers for 2013 are based on the new classifications. Sanitarians working in hospitals were included in "health care assistants" in the previous classification while according to the new classification they are included in "other health service providers" (explaining the strong increase in the number of "other health service providers" in 2013).


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

Reference period: 1st January.
Coverage:
- Data available for head counts only.
- Since 2003 data refer to public and private hospitals, including private hospitals not accredited by the National Health Service.

Japan

Coverage: Persons in the following categories who are employed in hospitals that are medical institutions with 20 beds or more: Administrative staff, and Other staffs.

Korea

Coverage:
- Includes medical laboratory technologists, radiologists, technologists, dental technologists, dental hygienists, medical record administrators, isotope handlers, supervisors of radiation isotope, nutritionists, refrigerating handlers of hematopoietic stem cell, health insurance administrators, dentists, pharmacists, physical therapists, and occupational therapists.
Break in time series: Health insurance administrators are excluded from 2012.

Latvia

Source of data: Centre for Disease Prevention and Control; Statistical Report.
Reference period: 31 December.

Luxembourg

Data not available.

Mexico

Data not available.

Netherlands
Source of data: Statistics Netherlands.
- 2012 onwards: Data based on BIG Register (register of (para)medical professions); SSB database (micro-integrated database of Statistics Netherlands with data from the municipal register, tax register, social security, and business register).
- 2006-2011: Annual reports social account, combined with BIG register and SSB data.
Break in time series: since 2010 including other staff employed in hospitals.
Estimation method:
- Since 1999: The figures according to the annual reports social account have been distributed among 1) physicians (based on the BIG register) 2) nurses and midwives (based on the BIG register) 3) Health care assistants (based on LFS estimates for ISCO 5132) 4) other employees (up till 2010 further distribution was possible to other health service providers and other staff using the annual reports social account).

New Zealand

Data from 2010 onwards (FTEs and Headcount data)
Source of data: DHB Shared Services, DHB Workforce Information (DHBWI) from the Health Workforce Information Programme (HWIP).
Reference period: FTEs and Headcount data on 30 June.
Coverage:
- DHB employed personnel only
- The data reported to OECD collects a snap-shot of the DHB employed workforce using the following criteria:
  a) ‘Employed’ means those who have more than zero contracted hours;
  b) Do not have a ‘leaving date’ prior to or equal to the 30th June, i.e. they were actively employed on the reporting date;
  c) Do not have “Leave” in their job title (i.e. those on long term leave).
- The FTE is calculated by using the Total Contracted Hours variable (this records the annual contracted hours for that employee) and dividing by 2086 hours.
- As DHBWI uses snap-shot data there is no averaging over time for FTEs. This means that DHBWI have not reported on: a) casual workers (as they will have zero contracted hours DHBWI could only report headcount and not FTE at this stage) - typically >10% for large DHBs and <10% for small DHBs; and b) contractors – as they would often not show on the DHB’s HR Information System.
Break in time series: Break in 2010 for FTEs data, due to change in data source.

Data up to 2009 (FTEs only)
Source of data: Ministry of Health: DHB monthly financial templates.
Reference period: FTEs data are as of 30 June each year.
Coverage:
- DHB employed personnel only.
- Allied Health.
- Hospital employment numbers are based on provider arm only FTEs; the number of staff employed in the DHB Governance arm does not have a material effect on the results.
- Information does not count vacancies.
- Excludes private hospital employees.
- The figures for 30 June 2002 through 30 June 2007 represent the FTE total as of that date, while the FTE figures from 30 June 2008 represent the year to date average.
- Note: Public hospitals only.
Estimation method:
- Hospital employment numbers are based on the average accrued FTEs; this method takes the total number of hours worked (including overtime) and divides by 40 hours - a usual working week.
Break in time series: 2007. The average accrued FTE method was introduced on 1 July 2006; prior to this there was not a standardised method of reporting staff numbers. (As FTEs data provided relate to financial years (July to following June), the impact of this change was in the 2007 year.)

Norway
Source of data: Statistics Norway: Register-based statistics on employment of health-care personnel.
Reference period: 3rd week of November.
Deviation from the definition: Data refer to economically active professionals.

Coverage:
- The figures provided give the number of practising personnel within HP1. There is no guarantee that these professionals actually work in patient care as data refer to education the individuals have rather than the job they hold within the HP structure.

Poland

Data not available.

Portugal

Source of data: National Statistical Office - Hospitals Survey.
Reference period: 31st December.

Coverage:
- The Hospital Survey began in 1985. This survey covers the whole range of hospitals acting in Portugal: hospitals managed by the National Health Service (public hospitals with universal access), non-public state hospitals (military and prison) and private hospitals.
- Includes “technical diagnosis and therapeutic staff” and “senior health technician staff”.
- Information on full time equivalents is not available.

Break in time series:
- In 1999, a methodological change occurred in this survey. Information regarding qualified nurses and midwives, associate professional nurses and caring staff became available from then on. Therefore, there is a break in the series “Other health professionals employed by hospital” in 1999.

Slovak Republic

Source of data: National Health Information Center.
- “Annual report S (MZ SR) 1 – 01 on network of health care providers” for data up to 2008.
- “Report on network of health care providers” since 2009.
Reference period: 31st December.

Coverage:
- Data are available for FTE hospital employment in Hospitals - HP1 (according to the recommendations and definitions following the SHA version 1.0.) in the territory of the Slovak Republic (i.e. general hospitals, specialty hospitals, sanatoriums - i.e. hospitals providing long-term care for the chronically ill and hospitals providing rehabilitation and related services to physically challenged or disabled people).
- There are no data available for head count.
- In year 2008, physiotherapists are excluded and are included in the indicator Health care assistants employed in hospitals.

Break in time series:
- 2008: Physiotherapists are excluded and are included in the indicator Health care assistants employed in hospitals.
- 2009: Data source changed from “Annual report S (MZ SR) 1 – 01 on network of health care providers” for years 2008 and earlier and “Report on network of health care providers”.

Slovenia

Source of data: National Institute of Public Health, Slovenia, National Health Care Providers Database. With this database, data on hours worked (FTE) and jobs (number of contracts) were not available.
Reference period: 31st December.

Spain
Source of data:
- Since 2010: Ministry of Health, Social Services and Equity from Specialised Care Information System (Sistema de Información de Atención Especializada - SIAE). Reference period: 31st December.

Coverage:
- All public and private hospitals in Spain are included.
- Other health professionals: includes another health staff (university degree or adequate diploma) working in the hospital (e.g. physiotherapists, psychologists, pharmacists, etc.).
- FTE data are not available.

Sweden

Data not available.

Switzerland

Source of data: FSO Federal Statistical Office, Neuchâtel; hospital statistics; yearly census.

Turkey

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

Coverage:
- Other health service providers include: Surgery Technician, Anesthesia Technician, Biologist, Environmental Health Technician, Child Development Specialist, Dental Technician, Dietitian, Physical Therapy Technician, Physiotherapist, Emergency and First Aid Technician, Heart-Lung Pump Operation Technician, Laboratory Technician, Audiologist, Audiometric Technician, Orthopedic Technician, Pathological Anatomy Technician, Perfusion Pump Technician, prosthetic Technician, Psychologist, X-ray Technician, Health Physician, Health Officer of the war, Health Technician, Cytopathologist, Social Worker, Medical Secretary, Medical Technologist, Public Health Technician.
- Other health service providers employed in hospitals cover those in the MoH, universities and private sector.
- For 2010 and 2012 other sectors (other public establishments and local administrations) are included. MoND-affiliated facilities are not included until 2012.
- Data also include dentists and pharmacists working in public hospitals. For the private sector, data on dentists and pharmacists are available but there is no possibility to disaggregate salaried professionals from self-employed professionals. Hence dentists and pharmacists working in the private sector are excluded.

Break in time series:
- MoND-affiliated facilities are included since 2013.

United Kingdom

Data not available.

United States


Coverage: National.

Deviation from the definition: Data match OECD definition. Calculation methods match OECD definition.
- The Hospital Statistics draws its data from the AHA Annual Survey of Hospitals.
- Data are for all AHA-registered hospitals in the United States. The AHA Survey was mailed to all hospitals, both AHA-registered and non-registered, in the U.S. and its associated areas: American Samoa, Guam, the Marshall Islands, Puerto Rico and the Virgin Islands.
Estimates excluded U.S. associated territories, Puerto Rico and non-registered hospitals.

U.S. personnel data included full-time personnel and full-time equivalents for part-time personnel from 1954 onwards.

Overall AHA Survey average response rate: 82%.

U.S. government hospitals located outside the mainland U.S. were not included.

Personnel data include full-time personnel and equivalent of part-time personnel.

Full-time equivalent (FTE) is calculated as full time personnel plus .50 part time personnel.

Head count is calculated as full time personnel plus part time personnel.


Estimation: Survey.


NON-OECD ECONOMIES

Lithuania

Source of data: Health Information Centre of Institute of Hygiene, data of entire annual survey of health establishments.

Reference period: 31st December

Coverage: Data for all hospitals excluding nursing hospitals. Service contracts with non-employed health professionals are excluded.

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