Council of European Dentists

MANUAL OF DENTAL PRACTICE 2015

(Edition 5.1)

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with

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Preface

The revised EU Manual of Dental Practice (Edition 5) was commissioned by the Council of European Dentists[1] in April 2013. The work has been undertaken by Cardiff University, Wales, United Kingdom. Although the unit had editorial control over the content, most of the changes were suggested and validated by the member associations of the Council.

This edition (5.1) corrects a number of errors identified after publication. All data are as 2013 and have not been updated to 2015 data.

About the authors[2]

Dr Anthony Kravitz graduated in dentistry from the University of Manchester, England, in 1966. Following a short period working in a hospital he has worked in general dental practice ever since. From 1988 to 1994 he chaired the British Dental Association's Dental Auxiliaries' Committee and from 1997 until 2003, was the chief negotiator for the UK's NHS general practitioners, when head of the relevant BDA committee. From 1996 until 2003 he was chairman of the Ethics and Quality Assurance Working Group of the then EU Dental Liaison Committee.

He gained a Master's degree from the University of Wales in 2005 and subsequently was awarded Fellowships at both the Faculty of General Dental Practice and the Faculty of Dental Surgery, at the Royal College of Surgeons of England.

He is an Honorary Research Fellow at the Cardiff University, Wales and his research interests include healthcare systems and the use of dental auxiliaries. He is also co-chair of the General Dental Council's disciplinary body, the Fitness to Practise Panel.

Anthony was co-author (with Professor Elizabeth Treasure) of the third and fourth editions of the EU Manual of Dental Practice (2004 and 2009)

President of the BDA from May 2004 until May 2005, he was awarded an honour (OBE) by Her Majesty The Queen in 2002.

Professor Alison Bullock: After gaining a PhD in 1988, Alison taught for a year before taking up a research post at the School of Education, University of Birmingham in 1990. She was promoted to Reader in Medical and Dental Education in 2005 and served as co-Director of Research for three years from October 2005.

She took up her current post as Professor and Director of the Cardiff Unit for Research and Evaluation in Medical and Dental Education (CUREMeDE) at Cardiff University in 2009. With a focus on the education and development of health professionals, her research interests include: knowledge transfer and exchange; continuing professional development and impact on practice; workplace based learning.

She was President of the Education Research Group of the International Association of Dental Research (IADR) 2010-12.

Professor Jonathan Cowpe graduated in dentistry from the University of Manchester in 1975. Following training in Oral Surgery he was appointed Senior Lecturer/Consultant in Oral Surgery at Dundee Dental School in 1985. He gained his PhD, on the application of quantitative cyto-pathological techniques to the early diagnosis of oral malignancy, in 1984. He was appointed Senior Lecturer at the University of Wales College of Medicine in 1992 and then to the Chair in Oral Surgery at Bristol Dental School in 1996. He was Head of Bristol Dental School from 2001 to 20004.

He was Dean of the Faculty of Dental Surgery at the Royal College of Surgeons in Edinburgh from 2005 to 2008 and is Chair of the Joint Committee for Postgraduate Training in Dentistry (JCPTD). He has been Director of Dental Postgraduate Education in Wales since 2009. His particular interest now lies in the field of dental education. He was Co-ordinator for an EU six partner, 2-year project, DentCPD, providing a dental CPD inventory, including core topics, CPD delivery guidelines, an e-learning module and guidelines (2010-12).

Ms Emma Barnes: After completing a degree in psychology and sociology, Emma taught psychology and research methods for health and social care vocational courses, and later, to first year undergraduates. Following her MSc in Qualitative Research Methods she started her research career as a Research Assistant in the Graduate School of Education at the University of Bristol, before moving to Cardiff University in 2006, working firstly in the Department of Child Health and then the Department of Psychological Medicine and Clinical Neurosciences.

In 2010 Emma joined Cardiff Unit for Research and Evaluation in Medical and Dental Education (CUREMeDE) as a Research Associate. Working in close collaboration with the Wales Deanery, (School of Postgraduate Medical and Dental Education), her work focuses on topics around continuing professional development for medical and dental health professionals, and knowledge transfer and exchange.

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In addition, the authors obtained information from the websites of the following organisations, without direct contact with them:

The Federation Dentaire Internationale (FDI)
The European Commission, including Eurostat
The World Health Organisation (WHO)
Union Bank of Switzerland (UBS)
The Organisation for Economic Cooperation and Development (OECD)
The Committee of European Dental Officers (CECDO)
The CIA Worldfactbook
The International Monetary Fund (IMF)
The World Bank
Deloitte
Price Waterhouse Cooper

Disclaimer

The Manual was originally sent for publication in February 2014 and then re-publication in February 2015: data may have subsequently changed.

Introduction

Background

In common with many other professionals, dentists and other dental professionals are increasingly seeking opportunities to work and live in other countries. Within the EU, the ability for dentists to move and work in any country has never been greater and many national dental associations have experienced a considerable increase in the number of enquiries from members about practising in another country. The problems and expense of answering these questions on an *ad hoc* basis, and the need for associations to conduct their national political negotiations in the context of international experience, resulted in the European Union Dental Liaison Committee (EUDLC) commissioning the Dental Public Health Unit of the University of Wales Dental School in Cardiff (UK), in 1993, to produce a comprehensive reference document describing the legal and ethical regulations, dental training requirements, oral health systems and the organisation of dental practice in 32 European (EU and EEA) countries.

The scope and presentation of the review

The Manual's primary aim is to provide comprehensive and detailed information for dentists and dental professionals who are considering working in another country. In fact, the Manual has proved to be of value to governments and regulators also. It is widely quoted in professional journals and papers.

The authors have endeavoured to construct a basic, minimum framework as an introduction to the most relevant topics, and a well-informed starting point for further questions which individuals may raise.

It has been written as a practical "handbook" in which information is easy to find and to understand. The country chapters also aim to balance information about formal requirements including laws, codes of practice and other regulations with descriptions of how things work in reality.

An introduction to the EU and dental practitioners

The opening chapters outline the origins of the EU and its attitude to health; how the EU functions including descriptions of its formal institutions (for example, the Commission, the Council, the European Parliament, the Court of Justice) and the current membership of the EU. We have also described the EU Directives which are directly relevant to dentists, and we have listed relevant internet weblinks.

The comparative analysis

Further chapters provide a simple comparative analysis of the different systems for the delivery of oral healthcare service, the nature of education, training and the constitution of the dental workforce, different practising arrangements, and other regulatory frameworks and systems within which dentists work. We have briefly covered ethical codes, the monitoring of standards, specialist and auxiliary personnel, and the relative importance of oral health services provided outside general or private practice.

The country chapters

The bulk of the Manual contains the detailed descriptions of the oral health systems, and the ways in which dentists practise in each of 32 countries. In addition to the 28 countries of the EU, Iceland, Liechtenstein and Norway (the EEA), and Switzerland are included. Greenland and the Faroe Islands are described in the chapter for Denmark. There are self-governing islands in the British Isles and a British Dependency in Europe - these have been included in the UK section. Monaco and San Marino are also added for the first time in this edition. Although neither country is a member of the EU, they have strong ties with the EU.

Each country chapter includes:

- A brief description of the historical background, political system and any features of the country's society, economy or geography that are significant for the organisation of health services.
- The main features of the health system, including: how it is funded, how health policy is decided, and how the provision of health services is organised.
- A section on oral healthcare which provides a general overview of the bodies responsible for its provision, the population groups who have access, and the services that are available to them.
- A description of entry to and content of dental school (undergraduate) education and training, and the requirements for registration - including the requirements for legal practice, the bodies which approve applications, the documents which need to be submitted, and any other conditions which need to be met. Additionally, any postgraduate education and training (including specialist training) is described. The paragraphs on *Specialists* list the dental specialties that are recognised, including the formal training required for each, and its location and duration.
- A section on what constitutes the dental workforce in each country, including numbers of dentists and specialists. There are several paragraphs on *Dental Auxiliaries,* which list the types of auxiliary that are recognised, what procedures they are allowed to carry out, where they work and the rules within which they may legally practise.
- Paragraphs on Working in General Practice, Working in the Public Dental Service (where appropriate), Working in Hospitals, and Working in Universities and Dental Faculties. For each of these, there is a brief description of the staff titles and functions, the minimum formal qualifications required, and how dentists are paid. For general or private practice this usually involves details of the administration of any fee-scales, whether remuneration is part of a contract, rules for prior approval, and some practical details of how to join or establish a practice.
- A section on dentistry in each country which is described as "Professional Matters" and includes an explanation of the framework for dental practice in terms of professional organisations, ethical codes and any other systems for monitoring standards and handling complaints.

- A "Financial" section, which briefly introduces many financial considerations for practice.

- Finally there is an "*Other useful information*" section which provides the name, address, telephone and fax numbers, website and email address of the main national dental associations, together with some other general data.

Information collection and validation

The history of the editions, the sources of information used, and the validation of these are listed in Annex 1.

Romania

There was no cooperation from the dental associations and other authorities, or the universities in Romania, to update the information relating to that country. To collect information, Cardiff University was greatly assisted by Dr Nicolae Cazacu, the recent Secretary-General, of the Romanian College of Dentists, but his access to information was limited. Some of the information has been collected from general sources on the internet.

Additional explanatory notes

It was not possible to obtain a single, valid reference date for all data across all countries of Europe. **The collection of data took place during 2013, and so this should be assumed to be the reference year for the data**, except where another date is shown.

UK English language conventions have been used for expressing text, numbers and figures, so that:

- Decimals are expressed with a point, eg 5.3
- Millions are expressed with a comma, eg 1,000,000
- "Billion" refers to One Thousand Million
- UK English conventions for spelling are used, for example organisation is spelt with an "s", rather than a "z", as in some English speaking countries
- The sign for the Euro is € and this is placed before the number, eg €100
- Data was finalised in January 2014, so any financial or currency problems after this date are not reflected here.
- The Manual was produced using Microsoft Word 2010, Build 14.0.7113.5005 (32-bit) and may display differently in any other version.

Edition 5.1

During 2014 several countries contacted the CED to advise that there were errors in the information published. Text changes have been made and corrected data inserted at the request of the following countries:

France
Germany
Hungary
Lithuania
Malta
Netherlands
Sweden

These were all effected in Jnauary 2015. The NMT (Netherlands) became the Royal Dutch Dental Association (KNMT) in June 2014, but the title has not been changed in the Manual to reflect that all text and data relate to January 2014 or earlier.

Definitions

Percentage of Gross Domestic (or National) Product (GDP/GNP) spent on oral health

This refers the proportion of a country's overall wealth which is spent on dentistry – through national health/social insurance AND private care, if known.

Private care

This refers to dental care that is paid for entirely by patients either directly to the dentist or through private dental insurance, without any government or social insurance subsidy or reimbursement. It does NOT refer to co-payments made through a national health or social insurance scheme.

Private insurance for dental care

This refers to insurance for dental treatment which patients buy from independent insurance companies not directly controlled by either the government or any social insurance scheme.

Percentage of Oral Health (OH) expenditure private

This refers to the total expenditure (in money terms) by patients on dentistry, using private care (as defined above) only. Expenditure by patients on co-payments in any state scheme or through any social insurance is NOT included in this figure.

Co-payments

These are payments made by patients towards the cost of their dental treatment in a state or social or private insurance scheme. Also, where the scheme involves reimbursement, the amount not reimbursed is a co-payment.

Vocational training

This refers to a period AFTER graduation, following registration with the competent authority, when the new dentist practises in a mandatory supervised environment (such as a training practice or public clinic or hospital department). The training period may - but not necessarily - include mandatory further education and a further examination before the dentist can practise in a non-supervised environment, and own his or her own dental practice.

Cost of registration

This refers to the annual cost of registration (if any) with the competent body which registers dentists in a country.

Specialists

These are dentists who have completed a further period of special training following their basic qualification as a dentist and then been registered with some national authority as a "specialist". The only EU-wide acknowledged specialists are orthodontists, oral surgeons and oral maxillo-facial surgeons – but many countries have additional classes of specialists.

Overseas dentists

This refers to dentists who have received their primary dental qualification in any country other than the listed (host) country, even if they are nationals of that host country.

A dentist who is not a national of the host country, but has qualified in that country is not an "overseas dentist" for the purpose of this Manual.

References by countries to "abroad" refer to another country other than their own.

Active dentists

This refers to dentists who remain on their country's register or other such list of dentists who practise in a clinic, general practice, hospital department, armed forces, administrative office or university. The difference between the number of dentists in a country and the "active dentists" should represent those dentists who are retired or who no longer undertake any form of dentistry, including administrative dentistry.

General Practice (in some countries referred to as "Liberal" Practice)

This refers to a dental practice in premises in which the practice is wholly owned by a dentist ("general dental practitioner") or company (corporate); alternatively, the premises may be rented from the government or some other (private) person or company.

The owner dentist or company is responsible for the running costs of the practice, including the employment and labour costs of those employed there, such as other dentists and dental auxiliaries.

Salaried dentists who work in dentist-owned practices are also described as general dental practitioners.

The income for the general practice may be derived from a number of sources:

- direct payments by patients, such as "co-payments" for state or social insurance schemes, or fully private dental care
- payments from state or social insurance schemes
- payments by private insurance companies

The ownership of the practice, rather than the method of income, defines a general practice.

Public dental services

"Public dental services" refers to dental care which is provided in government health centres or publicly owned clinics, organised by municipalities or some other local or national organisation, singly or collectively. Dental services are often part of other local health services. The dentists working in these clinics are paid by salary. Often they work part-time in the clinics and may fill the remainder of their working time in general practice or some other category of dentistry.

"Public dental services" does NOT refer to dental care given in a general practice through a state funded or social insurance supported scheme.

Corporate Dentistry

This refers to limited companies which own and manage dental practices. The Board of the company may comprise non-dentists although usually at least one (if not all) of the members must be a dentist or dental auxiliary. The company will employ the dentists (and dental auxiliaries) who provide the dental care.

Part 1: The European Union

The European Union (EU) was set up after the 2nd World War. The process of European integration was launched on 9 May 1950 when France officially proposed to create "the first concrete foundation of a European federation". The Treaty of Paris which was signed on 18th April, 1951, created the European Coal and Steel Community (ECSC) in 1952. Six countries (Belgium, the Federal Republic of Germany, France, Italy, Luxembourg and the Netherlands) joined from the very beginning. The success of this limited agreement persuaded the six signatories to extend their commitment.

To achieve this, on 25th March 1957, they negotiated and agreed the two Treaties of Rome which created the European Economic Community (EEC) and the European Atomic Energy Community (Euratom). These three collectively became known first as the EEC, then as the European Community (EC) and finally the European Union (EU).

Subsequently, there have been several waves of accessions, so that by 1st January 2014 the EU comprised 28 Member States.

Membership of the EU

- Belgium, France, Germany, Italy, Luxembourg and the Netherlands (March 1957) – were the founding countries
- Denmark, Ireland and the United Kingdom (January 1973)
- Greece (1981)
- Spain and Portugal (January 1986)
- Austria, Finland and Sweden (January 1995)
- Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia (May 2004)
- Bulgaria and Romania (January 2007)
- Croatia (July 2013)

On 1st January 1994, some of the privileges of the Community, for example "freedom of movement" were extended through the Treaty on the European Economic Area (EEA) to the countries of the European Free Trade Area (EFTA). These remaining non-EU EFTA countries are Iceland, Liechtenstein and Norway. One other EFTA country, Switzerland, was included in the initial agreement, but withdrew after a referendum in which its population rejected the concept. This decision has also delayed the involvement of Liechtenstein because of its "customs union" with Switzerland.

Objectives of the EU

The European Union is said to be based on the rule of law and democracy. It is neither a new State replacing existing ones nor is it comparable to other international organisations. Its Member States delegate sovereignty to common institutions representing the interests of the Union as a whole on questions of joint interest. All decisions and procedures are derived from the basic treaties ratified by the Member States.

It has been suggested that European integration has delivered half a century of stability, peace and economic prosperity. It has helped to raise standards of living, built an internal market, launched the Euro and strengthened the Union's voice in the world.

Principal objectives of the Union are:

- *Establish European citizenship*
- *Ensure freedom, security and justice*
- *Promote economic and social progress*
- *Assert Europe's role in the world*

The EC treaty was amended on 1st July, 1987, by the Single European Act (SEA). This restated the objectives of the EC by formalising the commitment to the completion of the "Internal Market" by 1992. The Act also extended the competence of the Community to new areas such as environmental improvement and the strengthening of social cohesion, and modified the decision making process by extending the use of majority voting in the Council of Ministers.

The 1993 Maastricht Treaty, which led to the creation of the European Union, further developed these concepts and a "Green Paper" on European Social Policy was introduced in December of that year. Issues addressed included unemployment, social protection and social standards, the Single Market and effective freedom of movement, equal opportunities for men and women and the transition to economic and monetary union.

Between March 1996 and June 1997 an Intergovernmental Conference (IGC) developed the consolidated Treaty of Amsterdam – which came into force on 1st May 1999 - revising the original Treaties on which the European Union was founded. The IGC is the formal mechanism for revising the Treaties, which are the constitutional texts of the European Union. Any changes are agreed following negotiations between governments of the Member States which belong to the Union.

The extension of the EU to embrace the new countries of Eastern Europe was agreed at the IGC held in Nice in 1999.

On 13th December 2007, EU leaders officially signed a new Treaty at a Special Summit in Lisbon, which came into force on 1st December 2009.

Health

The EU Health Strategy has 3 main objectives:

- fostering good health in an ageing Europe
- protecting citizens from health threats
- supporting dynamic health system and new technologies

In 2007, the European Commission published a White Paper for an EU Health Strategy, following a wide-ranging public consultation. This "aims to provide, for the first time, an overarching strategic framework spanning core issues in health as well as health in all policies and global health issues. The Strategy aims to set clear objectives to guide future work on health at the European level, and to put in place an implementation mechanism to achieve those objectives, working in partnership with Member States".

In 2013, a mid-term review of the Health Strategy was carried out, establishing that the strategy provides a coherent and comprehensive map of the main health-related issues.

The Member States can achieve more when working in coordination at EU level in certain areas. The Strategy serves as a consistent guiding framework and reference for actions taken at EU level.

For further information about the Strategy see Annex 5.

In 2009, there was a Commission initiative dealing with patient safety, including a Council recommendation on patient safety which in particular addressed the issue of Health Care Associated Infections. For further information see Annex 11.

The Institutions

The EU is run by seven institutions, each playing a specific role:

- *European Parliament* (elected by the peoples of the Member States);
- *European Council* (which has the role of driving EU policy-making, headed by the President.);
- *The Council* (composed of representatives of each Member State at ministerial level)
- *European Commission* (driving force and executive body);
- *Court of Justice* (compliance with EU law);
- *European Central Bank*
- *Court of Auditors* (sound and lawful management of the EU budget).

Five further bodies are part of the institutional system:

- *European Economic and Social Committee* (expresses the opinions of organised civil society on economic and social issues);
- *Committee of the Regions* (expresses the opinions of regional and local authorities on regional policy, environment, and education);
- *European Ombudsman* (deals with complaints from citizens concerning maladministration by an EU institution or body);
- *European Investment Bank* (contributes to EU objectives by financing public and private long-term investments);
- *European Central Bank* (responsible for monetary policy and foreign exchange operations).

National Parliaments

The Lisbon Treaty, in 2009, gave the national parliaments of Member States greater powers at an EU level. Parliaments are now able to comment on draft legislations and other activities.

A number of agencies and bodies complete the system. For further information about each institution, please see Annex 2.

The Economy of the EU

The traditional way of measuring the "wealth" of a nation is through its **Gross Domestic Product** (GDP). The GDP measures output generated through production by labour and property which is physically located within the confines of a country. It excludes such factors as income earned by its citizens working overseas, but does include factors such as the rental value of owner-occupied housing.
The measure of a country's output of goods and services is calculated using personal consumption, government expenditures, private investment, inventory growth and trade balance. GDP is the broadest measure of the health of an economy but is often expressed now in **Purchasing Power Parity** (PPP) - see below.

The **Gross National Product** (GNP) is the total value of all final goods and services produced for consumption in society during a particular time period. Its rise or fall measures economic activity based on the labour and production output *within* a country. The figures used to assemble data include the manufacture of tangible goods such as cars, furniture, and bread, and the provision of services used in daily living such as education, healthcare, and auto repair. Intermediate services used in the production of the final product are not separated since they are reflected in the final price of the goods or service.

The GNP does include allowances for depreciation and indirect business taxes such as those on sales and property. The GNP is not usually used nowadays as it does not facilitate international comparisons in an accurate manner.

PPP is a theory which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries. This means that the exchange rate between two countries should equal the ratio of the two countries' price level of a fixed basket of goods and services. When a country's domestic price level is increasing (ie the country experiences inflation), that country's exchange rate must be depreciated in order to return to PPP.

The basis for PPP is the "law of one price". In the absence of transportation and other transaction costs, competitive markets will equalize the price of an identical good in two countries when the prices are expressed in the same currency.

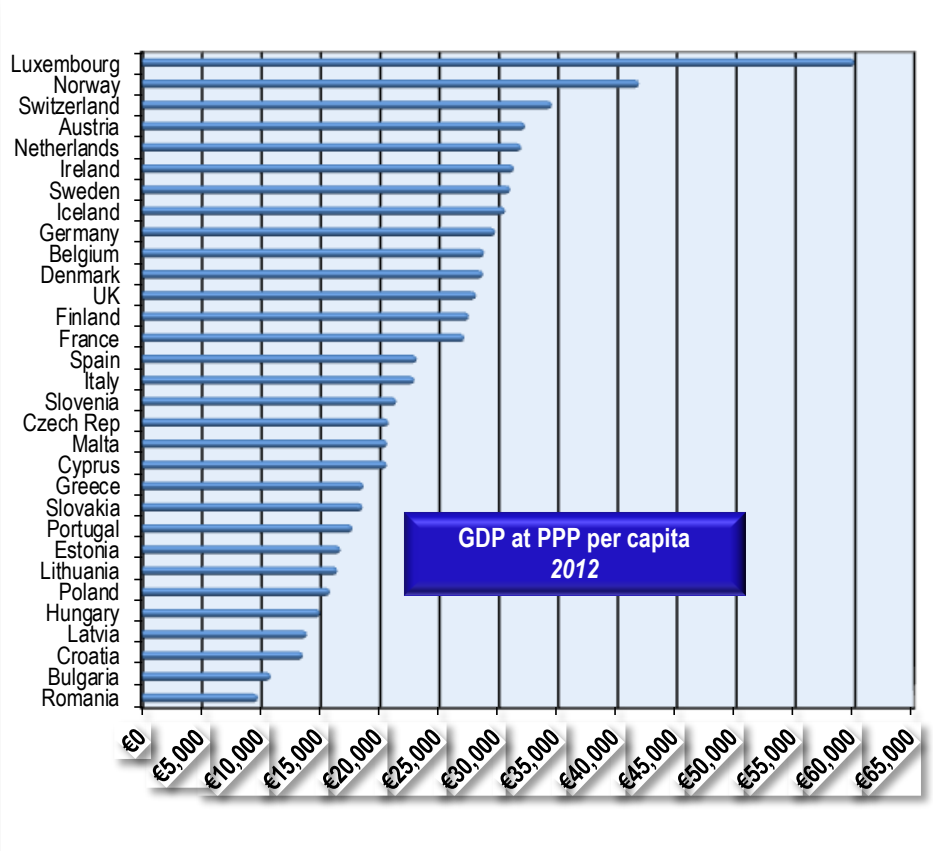
For example, a particular TV set that sells for €750 in Calais should cost £625 in Dover, when the exchange rate between the UK and France is €1.20 = £1. Clearly, PPP between different countries within the Eurozone is easier to measure. So, looking at relative wealth for all the EU/EEA countries using PPP has slightly changed the order of countries within the chart (Chart 1, next page), but still shows the apparent disparity between the richer and poorer countries of Europe.

These figures must be taken into account when comparing incomes and fees between individual countries.

So, GDP is a crude measure for oral healthcare comparisons, and a better measure is GDP per capita, based on current purchasing power parities

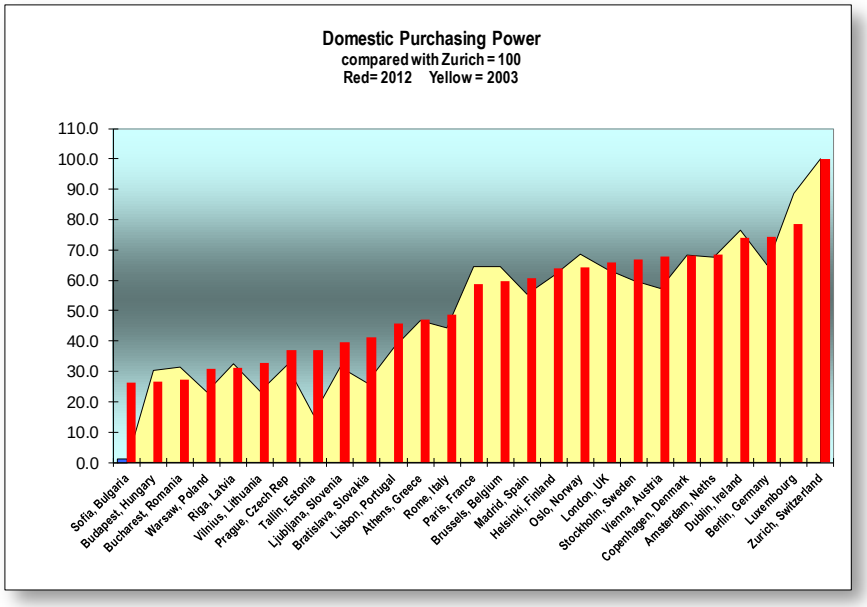
For individuals, however, their own income and what this will buy may have more relevance. UBS bank produces data which compares prices and earnings in the largest city in each EU/EEA country. The earnings data uses a basket of earnings from various trades and professions:

Chart 1 – Gross Domestic Product per capita at Purchasing Power Parity in 2012



Source: International Monetary Fund, World Economic Outlook Database, April 2013
http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/weoselco.aspx?g=2001&sg=All+countries

Chart 2 – Domestic Purchasing Power, including rent, in 2012 – based on Zurich = 100



Source: UBS Price and Earnings November 2012

Chart 2 shows the relative purchasing power of all goods and rent, November 2012, based on Zurich, taking net wages or salary into consideration. So, people living in Luxembourg were in the second best position to purchase goods or services and those in Sofia the least. These comparisons also take into account currency as some of the countries are not in the Eurozone..

Part 2: The Freedom of Movement and Acquired Rights

A **Directive** is a piece of European legislation which is addressed to Member States. Once such legislation is passed at the European level, each Member State must ensure that it is effectively applied in their legal system. The Directive prescribes an end result. The form and methods of the application is a matter for each Member State to decide for itself. In principle, a Directive takes effect through national implementing measures (national legislation). However, it is possible that even where a Member State has not yet implemented a Directive some of its provisions could have direct effect. This means that if a Directive confers direct rights to individuals, then individuals could rely on the Directive before a judge without having to wait for national legislation to implement it. Furthermore, if the individuals feel that losses have been incurred because national authorities failed to implement Directive correctly, then they may be able to sue for damages. Such damages can only be obtained in national courts.

Regulations are the most direct form of EU law - as soon as they are passed, they have binding legal force throughout every Member State, on a par with national laws. National governments do not have to take action themselves to implement EU regulations. They are different from directives, which are addressed to national authorities who must then take action to make them part of national law, and decisions, which apply in specific cases only, involving particular authorities or individuals. Regulations are passed either jointly by the EU Council and European Parliament, or by the Commission alone.

The Freedom of Movement

The principle of freedom of movement of workers, which was established in 1969, was intended to "abolish any discrimination based on nationality between workers of the Member States (MS) in employment, remuneration and other conditions of work and employment".

In essence, this means that every worker who is a citizen of a member state has the right to:

- accept offers of employment in any EU country;
- move freely within the Union for the purposes of employment;
- be employed in a country in accordance with the provisions governing the employment of nationals of that country;
- remain in the country after the employment ceases.

Limitations to this fundamental principle will only be allowed if they can be justified on grounds of public policy, public security or public health (including patient safety).

Since 1980, freedom of movement has applied to dentists from those Member States whose dental education and training met the requirements of the relevant Directives. Any dentist who is an EU national and has a primary dental degree or diploma obtained in a member state is able to practise in any country in the Union.

Dentists wishing to practise in the EU must register with the competent authority in the country in which they wish to work. The details of the competent authority which is responsible for certifying that diplomas, certificates and other qualifications held by a dental practitioner meet the requirements are set out at the end of every country section. Articles 4c and 4d of the Professional Qualifications Directive (PQD) 2013/55/EU (page 10), define the role of the home Member State authorities[3].

Each country also has an information centre which may be the registration body or national dental association which will provide details of the registration procedure and any special requirements that there may be. The names and addresses of these centres are at the end of every country section.

Member States must be proportionate in relation to any additional obstacles to prevent an EU national with an EU qualification from practising. Also, although the Directives facilitate free movement, they do not override all internal requirements and a host country may place the same restrictions on an immigrant dentist as it does on its own nationals.

Some dentists, who wish to emigrate, make use of the services offered by agents in a country to help them with the registration procedures. Such services can be very expensive and are not normally necessary. Their use is not recommended.

From the beginning of 1994, freedom of movement has also applied to those EFTA countries who are members of the EEA[4].

Freedom of Movement and the Accession Countries

The Accession countries had to ensure that, concerning the free movement of workers, there were no provisions in their legislation which are contrary to EU rules and that all provisions, in particular those relating to criteria on citizenship, residence or linguistic ability, are in full conformity with the *acquis* (of accession).

The key issue is that of *free movement of workers* and it has been treated in a broadly similar way for all countries. The political and practical importance of this area of the *acquis* and the sensitivities and uncertainties surrounding mobility of workers led to transitional measures. It was expected that the predicted labour migration from the Accession countries would be concentrated in certain Member States, resulting in disturbances of the labour markets there. Concerns about the impact of the free movement of workers were based on considerations such as geographical proximity, income differentials, unemployment and propensity to migrate. The EU was also worried that this issue threatened to alienate public opinion and to affect overall public support for enlargement.

The EU did not request a transition period in relation to **Malta** and **Cyprus,** when they joined the EU in 2004. However then, and in 2007 and 2013, for all the other countries, a common approach was used.

3 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:354:0132:0170:en:PDF

4 For more information, see: http://ec.europa.eu/dgs/internal_market/index_en.htm or http://europa.eu/youreurope/advice/index_en.htm

Under the transitional arrangement, the rights of nationals from new Member States who were already legally resident and employed in a MS were protected. The rights of family members were also taken into account consistent with the practice in the case of previous accessions.

This arrangement was accepted by the Accession countries subject to some minor adaptations. The transition period for Bulgaria and Romania ended on 31st December 2013.[5]

Freedom of Movement and family members

European Parliament Directive 2004/38/EC legislated on the right of citizens of the EU and their family members to move and reside freely within the territory of the Member States. The Directive was implemented on 30th April 2006.

For further information, please go to Annex 3

Acquired Rights

Where the evidence of formal qualifications as a dental practitioner or as a specialised dental practitioner, held by Member State nationals, does not satisfy all the training requirements referred to in the Professional Qualifications Directive (PQD), each Member State has to recognise as sufficient proof evidence of formal qualifications issued by those Member States. This is only insofar as such evidence attests to successful completion of training which began before the reference dates laid down in Annex V [of the PQD] and is accompanied by a certificate stating that the holder has been effectively and lawfully engaged in the activities in question for at least three consecutive years during the five years preceding the award of the certificate.

Acquired Rights were also gained by those who were practising in the former East Germany, the Baltic States (having gained their qualifications in the Soviet Union) and some of those who had been practising in Italy. They were also gained by dental professionals practising in Spain (relating to earlier medical training); Austria; Slovenia; and Croatia (in relation to the former Yugoslavia),

Additonally, the main principles of the Directive give the right to free movement and residence within the territory of the Member States – also to their family members.

The Directive requires that family members of EU citizens are treated as EU citizens. This includes the right of family members to take up employment or self-employment, providing they have the right of residence or permanent residence.

The main conditions for a non-EEA national to be treated as an EEA national in a Member State (MS) are that the non-EEA national must be the family member of an EEA national (other than a national of the particular MS being applied to) and that the EEA national is moving to work or reside in the particular MS being applied to and their family member is accompanying them.

The entitlements given to the non-EEA family member are that they have the right to equal treatment in the particular MS being applied to as a national of that particular MS. This right to equal treatment arises when the family member has the right to residence or permanent residence in the particular MS being applied to.

Persons who are EEA nationals themselves have rights from their own EEA nationality.

Rights conferred by this Directive do not extend to a substantive right to have professional qualifications recognised. Entitlement to be treated as an EEA national in the particular Member State being applied to does not lead to automatic recognition of qualifications. But, the applicant is entitled to equal treatment of his/her qualifications as a national of the particular MS being applied to. The qualifications must be considered under the PQD of 2013 in the same way that qualifications gained in the particular MS being applied are considered, if he/she possessed the same qualifications as the applicant.

For further, detailed information about Acquired Rights, please see Annex 3.

[5] There are arrangements following the accession of Croatia in 2013. Self-employed Croatians and students who are working only part-time should not be affected by any restrictions on the Freedom of Movement.

However, several Member States have put initial restrictions on other Croatian workers: Austria, Belgium, Germany, Luxembourg, the Netherlands, Slovenia, Spain and the United Kingdom have imposed restrictions on Croatians doing certain kinds of work. There is no restriction on searching for work done in the initial 3 months of residence.

Ten member states have not imposed any restrictions on Croatian job seekers: the Czech Republic, Denmark, Estonia, Finland, Hungary, Ireland, Lithuania, Romania, Slovakia and Sweden.

Part 3: Directives involving the Dental Profession

Recognition of Professional Qualifications

The recognition of professional qualifications in dentistry is currently regulated by Directive 2005/36/EC as amended by Directive 2013/55/EU (hereinafter PQD).

This Directive establishes the rules under which a host Member State recognises professional qualifications obtained in one or more other Member States and which will allow the holder of these qualifications to pursue the same profession in the host Member State. It is applicable to all Member State nationals.

Professional qualifications obtained in a third country may also be recognised by the host Member State under certain conditions specified in the Directive (Articles 2(2) and 3(1)(a) of the PQD). In case of dentistry, the initial recognition needs to respect the minimum training conditions laid down in Title III Chapter III sections 1 and 4.

Directive on the recognition of professional qualifications (PQD) 2005/36 EC

On 20th October 2005, Directive 2005/36 EC came into force and replaced the earlier Dental Directives (78/686 and 78/687 EEC) and 13 others related to the recognition of professional qualifications of dental practitioners, doctors of medicine, nurses responsible for general care, midwifes, pharmacists, veterinary surgeons and architects. It improved and simplified the system of automatic recognition of dental qualifications.

A number of changes were introduced compared with the previous rules, including greater liberalisation of the provision of services and increased flexibility in the procedures for updating the Directive. The Directive also aimed to make it easier for regulated professionals to provide services on a "temporary and occasional" basis in Member States (MS) other than the MS of establishment with a minimum of bureaucratic impediment.

Directive 2013/55/EU of the European Parliament and of the Council of 20th November 2013 (Amendments to Directive 2005/36 EC)[6]

On 18th January 2014, Directive 2013/55/EU came into force, amending several provisions of Directive 2005/36/EC. The review aimed at making the system of mutual recognition of professional qualifications more efficient in order to achieve greater mobility of skilled workers across the EU.

The main features of the amended Directive include:

- the creation of a European Professional Card;
- the introduction of the principle of partial access to certain professions (not applicable to professionals benefiting from automatic recognition of their professional qualifications such as dentists);
- the recognition of professional traineeships carried out in another Member State or in a third country;
- the clarification and update of training requirements for professions under the automatic principle regime (and for dental practitioners, changes to the minimum duration of training); and
- measures for a better use of existing instruments such as the Internal Market Information (IMI) system.

- ***Transparency of regulated professions***

A regulated profession means that access to the profession is subject to a person holding a specific qualification, such as a university diploma, and that activities are reserved to holders of such qualifications.

Article 59 of Directive 2013/55/EU established a transparency and mutual evaluation exercise to be carried out by Member States, which seeks to reduce the number of regulated professions and to remove unjustified regulatory barriers restricting the access to a profession or its pursuit. It involves examining the justification of the need for regulation against the principles of necessity, proportionality and non-discrimination.

- ***Continuous Professional Development***

Under Article 22(b), Member States will promote the continuous professional development of professionals who benefit from the principle of automatic recognition. These include, in particular, doctors of medicine, nurses responsible for general care, dental practitioners,, veterinary surgeons, midwives, pharmacists and architects also known as "sectoral professions".

Lifelong learning is of particular importance for a large number of professions. It is comprised of all general education, vocational education and training, non-formal education and informal learning undertaken throughout life, resulting in an improvement in knowledge, skills and competences, and may include professional ethics (see Article 3 (1) (l)). Recital 39 further states that it is for MS to *"adopt the detailed arrangements under which, through suitable ongoing training, professionals will keep abreast of technical and scientific process"*.

System of automatic recognition of professional qualifications for dental practitioners (Chapter III of the PQD)

Each Member State automatically recognises evidence of formal qualifications (diplomas, certificates and other evidence attesting successful completion of professional training) giving access to professional activities as a dental practitioner and as a specialised dental practitioner, covered by Annex V, points 5.3.2 and 5.3.3 of the PQD.

Article 35(5) of the PQD also establishes the principle of automatic recognition for new dental specialties (and its inclusion in point 5.3.3 of Annex V of the Directive) that are common to at least two-fifths of the Member States.

The description of the professional activities of dental practitioners is defined under Article 36 of the PQD.

For the purposes of equivalence in qualifications, this Directive sets minimum training requirements for dentists:

- ***Minimum training requirements, including length of training and content***

Admission to training as a dental practitioner (basic dental training) presupposes possession of a diploma or certificate

[6] http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013L0055

giving access, for the studies in question, to universities or higher institutes of an equivalent level, in a Member State.

The system of automatic recognition works on the basis of coordinated minimum training requirements. Basic dental training must be for at least 5 years' study, with the equivalent ECTS credits[7], and must consist of at least 5,000 hours of full-time theoretical and practical training. That comprises, at least, the programme described in point 5.3.1 of Annex V (of the PQD). This should guarantee that the person concerned has acquired commonly agreed knowledge and skills.

Under Article 22(a) of the PQD, Member States may authorise part-time training, provided that the overall duration, level and quality of such training is not lower than that of continuous full-time training.

The PQD provides a minimum programme of subjects to follow, which leaves room for the Member States to draw up more detailed study programmes. The list of subjects appears in Annex V (of the PQD), point 5.3.1 and can be amended by delegated acts to the extent required to adapt them to scientific and technical progress.

Following the professional training they have received, aspiring dentists will possess a training qualification which has been issued by the competent bodies in the Member States, bearing the titles described in the PQD, and will enable them to practise their profession in any Member State.

Articles 23 and 37 of the PQD establish the conditions under which dental practitioners can see recognised their professional qualifications which were obtained before their country joined the EU. This is known as the "acquired rights' regime (see Annex 3 of this Manual). In these cases, where the evidence of formal qualifications providing access to the professional activities of dental practitioners and specialised dental practitioners held by nationals of Member States do not satisfy all the training requirements described in Article 34 and 35, each Member State must recognise as sufficient proof evidence of formal qualifications issued by those Member States insofar as such evidence attests successful completion of training which began before the reference dates laid down in the Annexes 5.3.2 and 5.3.3 of the PQD, and is accompanied by a certificate stating that the holders have been effectively and lawfully engaged in the activities in question for at least three consecutive years during the five years preceding the award of the certificate. Further details specific to dental practitioners are mentioned under Article 37.

- ***Specialist training***

Full-time specialist dental courses must be of a minimum of three years' duration and must be supervised by the competent authorities or bodies. They must involve the personal participation of the dental practitioner who is training to be a specialist in the activity, and in the responsibilities of the establishment concerned.

Admission to specialist dental training is contingent upon completion and validation of basic dental training as defined in Article 34 of the PQD, or possession of the documents referred to in Articles 23 and 37.

The Commission is empowered to adopt delegated acts (in accordance with Article 57c) concerning the adaptation of the minimum period of specialist training to scientific and technical progress.

The Commission is also empowered to adopt delegated acts concerning the inclusion in point 5.3.3 of Annex V of the PQD of new dental specialties common to at least two-fifths of the Member States.

- ***Recognition of traineeships***

Given that national rules organising the access to regulated professions should not constitute an obstacle to the mobility of young graduates, when a graduate completes a professional traineeship in another Member State or in a third country, the professional traineeship will be recognised, under the conditions laid down by Article 55a of the PQD, when the graduate applies for access to a regulated profession in the home Member State. In particular, the traineeship must be in accordance with the Member State's guidelines on the organisation and recognition of traineeships. Member States may set a reasonable limit on the duration of the part of the professional traineeship which can be carried out abroad.

- ***Diplomas guaranteeing compliance***

The PQD lists the diplomas from each Member State which serve as evidence of having completed dental training which complies with the minimum training requirements. Each Member State must automatically recognise these diplomas and allow the holder to practise in that Member State[8].

- ***Knowledge of languages***

The knowledge of one official language of the host Member State is necessary in order for the professional (ie dental practitioner) to start practising in the host Member State. However, the control of the language by the host Member State can only be carried out after the recognition of the professional qualification. It is important for professions with patient safety implications, such as dentistry, that a language control is exercised before the professional accesses such a profession.

However, language controls have to be proportionate for the job in question and should not aim at excluding professionals from the labour market in the host Member State. The professional should be able to appeal against such controls under national law.

Employers will also continue to play an important role in ascertaining the knowledge of languages necessary to carry out professional activities in their workplaces.

- ***Partial access – Article 4f of the PQD***

The PQD applies to professionals who want to pursue the same profession in another Member State. However, there are cases where the activities concerned are part of a profession with a

[7] Recital 17 of the Amended PQD - European Credit Transfer and Accumulation System (ECTS) credits are already used in a large majority of higher education institutions in the Union and their use is becoming more common also in courses leading to the qualifications required for the exercise of a regulated profession. Therefore, it is necessary to introduce the possibility to express the duration of a programme also in ECTS. That possibility should not affect the other requirements for automatic recognition. One ECTS credit corresponds to 25-30 hours of study whereas 60 credits are normally required for the completion of one academic year. Source: EN L 354/134 Official Journal of the European Union 28.12.2013

[8] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:255:0022:0142:en:PDF

larger scope of activities in the host Member State. If the differences between the fields of activity are so large that in reality a full programme of education and training is required for the professional to compensate for shortcomings - if the professional so requests - a host Member State must grant partial access, determined on a case-by-case basis, to a professional activity in its territory, only when all the following conditions are fulfilled:

(i) the professional is fully qualified to exercise in the home Member State the professional activity for which partial access is sought in the host Member State;
(ii) differences between the professional activity legally exercised in the home Member State and the regulated profession in the host Member State as such are so large that the application of compensation measures would amount to requiring the applicant to complete the full programme of education and training required in the host Member State to have access to the full regulated profession in the host Member State;
(iii) the professional activity can objectively be separated from other activities falling under the regulated profession in the host Member State.

A Member State is able to refuse partial access to a profession, if it is justified by overriding reasons of general interest.

The principle of partial access does not apply for professionals benefiting from the principle of automatic recognition, ie the sectoral professions, which include dental practitioners.

- ***Principle of the free provision of services[9]***
    - ***Article 5 of the PQD***

This provision establishes the principle that Member States must not restrict, for any reason relating to professional qualifications, the free provision of services in another Member State if the service provider - a dental practitioner - is legally established in a Member State as a dental practitioner. This principle, and the provisions laid down in Title II of the PQD, only applies when the dental practitioner moves to the host Member State to pursue his/her activity on a temporary and occasional basis. The *"temporary and occasional nature"* of the services provided are assessed on a case-by-case basis, in relation to their *"duration, frequency, regularity and continuity"*.

This term is not further defined in the Directive. The assessment will therefore be a matter of judgement by competent authorities (regulatory bodies) in each case. The European Court of Justice has already ruled on this issue, providing further guidance on these terms.

The dental practitioner under this regime is subject to the same rules as national dental practitioners to practise the profession, in particular disciplinary provisions and other rules related to professional qualifications.

- ***Exemptions***

One of the key aspects of the principle of the free provision of services in the PQD is the exemption, under certain conditions, from the requirement for migrants to be registered in a professional organisation or body (see Article 6(a)).

However, in order to ensure the application of disciplinary provisions to the dental practitioner, Member States may provide for automatic temporary registration with the competent authority or for pro forma membership with the professional organisation or body. This is done when a copy of the declaration referred in Article 7(1) of the PQD accompanied by a copy of the documents referred in Article 7(2) are sent by the host competent authority to the relevant professional organisation or body. Competent authorities may not however charge any additional costs for this.

- ***Article 7 - declaration to be made in advance for the first provision of services in the Host Member State***

Member States may require service providers (ie dental practitioners) to inform competent authorities of their intention to provide services on a "temporary and occasional" basis, by providing a written declaration in advance. This declaration must be renewed once a year if the service provider intends to provide temporary or occasional services during the following year. It is of course open to regulators to review cases periodically once the migrant is registered in the Member State, to assess whether or not the service provision is genuinely temporary and occasional.

The service provider may provide this written declaration by any means.

Member States may require under Article 7.2 of the PQD that the declaration is accompanied by the following documents:

(i) proof of the service provider's nationality,
(ii) an attestation certifying that the holder is legally established in a Member State for the purpose of pursuing the activities concerned and that he is not prohibited from practising, even temporarily, at the moment of delivering the attestation;
(iii) evidence of professional qualifications;
(iv) an attestation confirming the absence of temporary or final suspensions from exercising the profession or of criminal convictions; and,
(v) a declaration about the applicant's knowledge of the language necessary for practising the profession in the host Member State.

A Member State may require additional information of the listed above if:

(i) the profession is regulated in parts of that Member State's territory in a different manner;

[9] The Principle of the free provision of services is explained in the Lisbon Treaty. The freedom of establishment, set out in Article 49 (ex Article 43 TEC) of the Treaty and the freedom to provide cross border services, set out in Article 56 (ex Article 49 TEC), are two of the "fundamental freedoms" which are central to the effective functioning of the EU Internal Market.

The principle of freedom of establishment enables an economic operator (whether a person or a company) to carry on an economic activity in a stable and continuous way in one or more Member States. The principle of the freedom to provide services enables an economic operator providing services in one Member State to offer services on a temporary basis in another Member State, without having to be established.

These provisions have direct effect. This means, in practice, that Member States must modify national laws that restrict freedom of establishment, or the freedom to provide services, and are therefore incompatible with these principles. Member States may only maintain such restrictions in specific circumstances where these are justified by overriding reasons of general interest, for instance on grounds of public policy, public security or public health; and where they are proportionate.
http://ec.europa.eu/internal_market/top_layer/services/index_en.htm

(ii) such regulation is applicable also to all nationals of that Member State;
(iii) the differences in such regulation are justified by overriding reasons of general interest relating to public health or safety of service recipients; and
(iv) the Member State has no other means of obtaining such information.

Under the PQD, the service provider is entitled to practise once he/she has complied with all of the above.

- ***Use of professional and academic titles***

Articles 52 and 53 of the PQD regulate the use of professional and academic titles.

Dental practitioners should use the professional title of the host Member State.

Dental practitioners also have the right to use the academic title conferred on them in the home Member State in the language of the home Member State.

Where this academic title is liable to be confused in the host Member State with a title which requires additional training not acquired by the beneficiary, then the host Member State may decide on which terms the home academic title can be used.

General system for the recognition of professional qualifications (Chapter I of the PQD).

This system applies as a fallback for all the professions (such as dental auxiliaries) not covered by specific rules of recognition (such as dentists) and to certain situations where the migrant professional does not meet the conditions set out under the automatic recognition regime (Chapter III of the PQD).

The conditions of recognition under the general system are specified in Article 13 of the PQD. If the competent authority of the host Member State thinks the training that the applicant has received differs significantly from the training required in the host Member State, the applicant may have to sit an aptitude test, or complete an adaptation period of up to three years.

The host Member State must, in principle, offer the applicant the choice between an adaptation period and an aptitude test. The host Member State can only derogate from this requirement in the cases specifically provided for under Article 14(3) of the PQD.

The PQD distinguishes under Article 11 five levels of professional qualifications so that they can be compared:

- attestation of competence which corresponds to general primary or secondary education, attesting that the holder has acquired general knowledge, or an attestation of competence issued by a competent authority in the home Member State on the basis of a training course not forming part of a certificate or diploma, or of three years professional experience;
- certificate which corresponds to training at secondary level, of a technical or professional nature or general in character, supplemented by a professional course;
- diploma certifying successful completion of training at post-secondary level of a duration of at least one year, or professional training which is comparable in terms of responsibilities and functions;
- diploma certifying successful completion of training at higher or university level of a duration of at least three years and less than four years;
- diploma certifying successful completion of training at higher or university level of a duration of at least four years.

On an exceptional basis, other types of training can be treated as one of the five levels.

For more details regarding the general system regime see Articles 10 to 15 of the PQD.

Automatic recognition on the basis of common training principles (Chapter IIIA of the PQD)

While taking into account the competence of Member States to decide on the qualifications required for the pursuit of professions in their territory and on the organisation of their education systems, the new provisions on common training principles intend to promote a more automatic character of recognition of professional qualifications for those professions which do not currently benefit from it. Indeed, the **professions** subject to automatic recognition, such as dental practitioner, are excluded from this regime (see Article 49a (2) (e) of the PQD).

The novelty, however, is the possibility for common training frameworks to also cover **dental specialties** that currently do not benefit from automatic recognition provisions under the PQD (see Article 49a(7) of the PQD). Common training frameworks on such specialties should offer a high level of public health and patient safety.

Common training principles can take the form of common training frameworks (meaning a common set of knowledge, skills and competences necessary for the pursuit of a specific profession) or of common training tests (meaning a standardised aptitude test available in participating Member States and reserved to holders of a particular professional qualification).

Professional qualifications obtained under common training frameworks should automatically be recognised by Member States. Article 49a(5) lays down the conditions under which Member States can be exempt of this regime.

Professional associations and organisations which are representative at national or Union level will be able to propose common training frameworks and common training tests.

Matters relating to sectoral and general system professions

- ***European professional card***

The PQD introduces a “European Professional Card”, which is an electronic certificate issued by the professional's home Member State, which will facilitate automatic recognition in the host Member State. The introduction of professional cards will be considered for a particular profession where:

  - there is clear interest from professionals, the national authorities and the business community;
  - the mobility of the professionals concerned has significant potential; and
  - the profession is regulated in a significant number of Member States.

- ***Alert mechanism***

The existing rules already provide for detailed obligations for Member States to exchange information. These obligations will be reinforced. In future, competent authorities of Member States will have to proactively alert the authorities of other Member States, using the IMI system, about professionals who are no longer entitled to practise their profession due to a disciplinary action or criminal conviction, through a specific alert mechanism. The alert should be made at the latest three days from the date of adoption of the decision restricting or prohibiting pursuit of the professional activity (in part or in its entirety).

- ***First provision of services***

For the first provision of services of certain service providers, Member States are given the option, under Article 7(4) of the Directive, of requiring competent authorities to check the professional qualifications. This applies to

(i) professions which fall under the general system with public health or safety implications
(ii) sectoral professions, in cases which fall within Article 10 of the Directive.

- ***Deadlines***

The PQD does not allow much flexibility in stipulating the deadlines within which competent authorities have to give the service provider a decision. There is one month to acknowledge receipt of an application and to draw attention to any missing documents. A decision has to be taken within three months of the date on which the application was received in full. Reasons have to be given for any rejection and it is possible for a rejection, or a failure to take a decision by the deadline, to be contested in the national courts (see Article 51 of the PQD).

Directive on Patients' Rights in Cross-border Healthcare

On 24th April 2011, **Directive 2011/24/EU on patients' rights in cross-border healthcare** entered into force. The objective of the Directive is to clarify patients' existing rights of access to healthcare services in EU Member States.
For further information see Annex 6.

Data Protection

Although national laws on data protection aimed to guarantee the same rights, some differences existed. The EC decided these differences could create potential obstacles to the free flow of information and additional burdens for economic operators and citizens. Additionally, some Member States did not have laws on data protection.

To remove the obstacles to the free movement of data, without diminishing the protection of personal data, Directive 95/46/EC[10] (**the Data Protection Directive**) was enacted to harmonise national provisions in this field. In January 2012, it was announced that there would be a redrafting of the current Data Protection Directive to create the **General Data Protection Regulation** (GDPR).

For further information, especially how this relates to dentistry, see Annex 7.

Consumer Liability

The main features of the **Directive on Liability for Defective Products** (85/374/EEC)[11] include the principle of "liability without fault". The Directive establishes the principle of objective liability or liability without fault of the producer in cases of damage caused by a defective product. If more than one person is liable for the same damage, it is joint liability. The word "*Producer*" has a wide meaning including: any participant in the production process, the importer of the defective product, any person putting their name, trade mark or other distinguishing feature on the product, or any person supplying a product whose producer cannot be identified.

The injured person must prove: the actual damage, the defect in the product and the causal relationship between damage and defect. As the Directive provides for liability without fault, it is not necessary to prove the negligence or fault of the producer or importer.

The general public is entitled to expect safety and determines the defectiveness of a product. Factors to be taken into account include: presentation of the product, use to which it could reasonably be put and the time when the product was put into circulation.

Producers are freed from all liability if they prove (in particular relation to dentistry) that the state of scientific and technical knowledge at the time when the product was put into circulation was not such as to enable the defect to be discovered. The producer's liability is not altered when the damage is caused both by a defect in the product and by the act or omission of a third party. However, when the injured person is at fault, the producer's liability may be reduced.

For the purposes of the Directive, "damage" means damage caused by death or by personal injuries.

The Directive does not in any way restrict compensation for non-material damage under national legislation. The injured person has three years within which to seek compensation. This period runs from the date on which the plaintiff became aware of the damage, the defect and the identity of the producer. The producer's liability expires at the end of a period of ten years from the date on which the producer put the product into circulation. No contractual clause may allow producers to limit their liability in relation to the injured person.

National provisions governing contractual or non-contractual liability are not affected by the Directive. Injured persons may therefore assert their rights accordingly.

The Directive allows each Member State to set a limit for a producer's total liability for damage resulting from death or personal injury caused by identical items with the same defect.

10 http://ec.europa.eu/justice/policies/privacy/docs/95-46-ce/dir1995-46_part1_en.pdf

11 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31985L0374:en:HTML

Misleading and Comparative Advertising

The **Directives on Misleading and Comparative Advertising**[12] were introduced to protect consumers, competitors and the interest of the public in general, against misleading advertising and its unfair consequences.

Misleading advertising is defined as any advertising which, in any way, either in its wording or presentation deceives or is likely to deceive the persons to whom it is addressed or whom it reaches; by reason of its deceptive nature, is likely to affect their economic behaviour; or for those reasons, injures or is likely to injure a competitor.

Comparative advertising is defined as any advertising that explicitly or by implication, identifies a competitor or goods or services offered by a competitor.

National rules may allow persons or organisations with a legitimate interest in prohibiting misleading advertising, or controlling comparative advertising, to take legal action and/or go before an administrative authority. Consumers have to check which system (judicial or administrative) their national authorities have chosen.

The national courts or administrative authorities have enough power to order advertising to cease, either for a certain period or definitively. They can also order its prohibition if the advertising has not yet been published, but its publication is imminent. A voluntary control by the national self-regulatory bodies can also be carried out.

Advertisers should always be able to justify the validity of any claims they make. Therefore advertisers (not consumers) have to provide evidence of the accuracy of their claims.

Cosmetics Regulation

In the early 1970s, the Member States of the EU decided to harmonise their national cosmetic regulations in order to enable the free circulation of cosmetic products within the Community. As a result of numerous discussions between experts from all Member States, Council Directive 76/768/EEC was adopted on 27 July 1976. The Directive was then recast with the adoption of Regulation (EC) No 1223/2009, of 30th November 2009.

This new **EU Regulation 1223/2009 - Cosmetics Regulation** came into force on 11th July 2013.

However, even before that new regulation, in the Summer of 2008 the European Commission commenced consultations, resulting in **Directive 2011/84/EU**[13] of 20th September 2011, amending the 1976 Directive. Article 2 stated that by 30th October 2012 all Member States had to adopt and publish the provisions necessary to comply with this Directive. Directive 2011/84/EC introduced only limited changes to the Annex of the Regulation and is not the main legislation governing cosmetics in the EU.

For further information see Annex 8.

Electronic Commerce

The E-Commerce Directive[14] was adopted on 8 June 2000. The objective was to ensure that information society services benefit from the internal-market principles of free movement of services and freedom of establishment, in particular through the principle that cross-border provision throughout the European Union cannot be restricted.

The Directive covers information society services and services allowing for online electronic transactions, such as interactive online shopping. Examples of sectors and activities covered include online newspapers, online databases, online financial services, online professional services (such as lawyers, doctors, accountants and estate agents), online entertainment services (such as audio-visual streamed content), online direct marketing and advertising and services providing access to the Internet.

The chief aim of the Directive is to ensure that the EU reaps the full benefits of e-commerce by boosting consumer confidence and giving providers of information society services legal certainty, without excessive red tape.

For further information, especially how this relates to dentistry, including ethical guidance for the use of the internet, see Annex 10.

Unfair Commercial Practices Directive

The **Directive 2005/29/EC**[15] on **Unfair Commercial Practices** (UCPD) was adopted on 11 May 2005. There are 4 key elements in the Directive, which are:

- a far reaching general clause defining practices which are unfair and therefore prohibited;
- the two main categories of unfair commercial practices - Misleading Practices (Actions and Omissions) and Aggressive Practices - - are defined in detail;
- provisions that aim at preventing exploitation of vulnerable consumers;
- an extensive black list of practices which are banned in all circumstances.

In particular, the Directive obliges businesses not to mislead consumers through acts or omissions; or subject them to aggressive commercial practices such as high pressure selling techniques. The Directive also provides additional protections for vulnerable consumers who are often the target of unscrupulous traders.

The Directive's wide scope – it applies to all business sectors – and flexible provisions means that it plugs gaps in existing EU consumer protection legislation and sets standards against which new practices are judged.

The Directive's broad scope means that it overlaps with many existing laws. In addition, because the UCPD is a maximum

12 http://ec.europa.eu/justice/consumer-marketing/files/communication_misleading_practices_protection_en.pdf

13 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:283:0036:0038:en:PDF

14 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32000L0031:EN:NOT

15 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32005L0029:en:NOT

harmonisation Directive (i.e. setting out the maximum level of restriction permissible in respect of unfair commercial practices which harm consumers' economic interests) a supplementary objective was introduced to achieve, where possible, some regulatory simplification.

Implementation of this Directive is said to help Member States to ensure their consumer regimes are amongst the best in the world. A review published in 14th March 2013, stated that the Directive had helped enhance consumer protection and required no amendment.[16]

Medicinal Products and Medical Devices

Medicinal products

Medicinal products are only available for dental treatment if they are licensed by the Member State where they are used in accordance with **Directive 2001/83/EC** and **EC Regulation 726/2004.**[17]

Further harmonisation of the regulations governing free movement of pharmaceuticals is established with the establishment of the European Agency for the Evaluation of Medicinal Products, in London[18]. The Agency is responsible for co-ordinating the evaluation and supervision of medicinal products for human and veterinary use in the Union, in order to remove remaining barriers to trade. EudraVigilance is the European data-processing network and database management system for the exchange, processing and evaluation of Individual Case Safety Reports (ICSRs) related to medicinal products authorised in the European Economic Area.

Medical devices

The **Medical Devices Directive** (93/42/EEC)[19], which applies to all medical and dental products which are non-pharmaceutical and inactive, also has as its major purpose the removal of the final barriers to trade and sets requirements governing safety and efficacy.

The Directive requires all manufacturers to register with the national competent authority and to observe certain design and manufacture requirements, clinical evaluation and conformity assessment procedures and provide for verification. The precise procedures and requirements vary according to the classification of the product: as custom-made, class I, IIa, IIb or III, depending upon the nature of the device.

The EU Member States applied a new **Directive 2007/47/EC**[20] amending Directive 93/42/EEC on Medical Devices and Directive 90/385/EEC on Active Implantable Medical Devices, as national law by March 21st 2010. The implementation of the new Directive changed, or affected, some of the existing provisions under the Directive 93/42/EEC on Medical Devices. This section provides an overview of the major issues relevant for the dental profession.

- Normally it is the dental technician who is the manufacturer of a dental prosthesis. To be a manufacturer, a dentist would have to be registered as such, meaning far-reaching obligations, such as registering all raw materials for prostheses etc.
- Custom-made devices are excluded from the obligation to carry CE marking.
- According to the Directive the patient is to be identified by name, acronym or a numerical code.
- The Directive requires that software which is used in medical devices or is a medical device itself (e.g. electronics in the unit, UV lamp, x-ray machine) has to be validated by the manufacturer. The burden on the dentist will depend on the instructions of the manufacturer – e.g. if the manufacturer insists on revalidation every three years, then the dentist will have to comply.
- For custom-made devices, the manufacturer "must undertake to review and document experience gained in the post-production phase". This could be interpreted as meaning that if no experience was gained – i.e. if no negative incidents relating to the medical device were notified – then there would be nothing to review.

In 2012 a Proposal was submitted outlining several amendments to the Directive to address changes in medical technology, standardise laws and improve access to information on devices. It was expected that the proposal will be adopted in 2014. For more information, please see Annex 11.

Directive on Prevention from Sharp Injuries in the Hospital and Healthcare Sector

Directive 2010/32/EU[21] recognises that health and safety of workers is an important issue and is linked with the health of patients. Health and safety is a hospital and healthcare sector-wide issue, and a responsibility for all workforce members.

The framework agreement applies to all workers in the hospital and healthcare sector with the aim of providing the safest working environment possible, minimising needlestick injuries through integrated risk assessment practices. For further information see Annex 11.

16 http://ec.europa.eu/justice/consumer-marketing/files/ucpd_report_en.pdf

17 http://ec.europa.eu/health/human-use/legal-framework/index_en.htm

18 http://www.emea.europa.eu/

19 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1993L0042:20071011:en:PDF

20 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:247:0021:0055:EN:PDF

21 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:134:0066:0072:EN:PDF

Part 4: Healthcare and Oral Healthcare Across the EU/EEA

Expenditure on Healthcare

The overall expenditure by countries on all forms of general healthcare (including dentistry) in the EU/EEA varies by a large amount, generally but not wholly according to a country's wealth as measured by GNP/GDP or PPP. However, there are major exceptions to this rule – so whereas Luxembourg and Denmark have a high GNP/GDP/PPP, their spending on health is about the average of 6.1%. Conversely, healthcare spending in Slovenia was high, in comparison with their GNP/GDP/PPP.

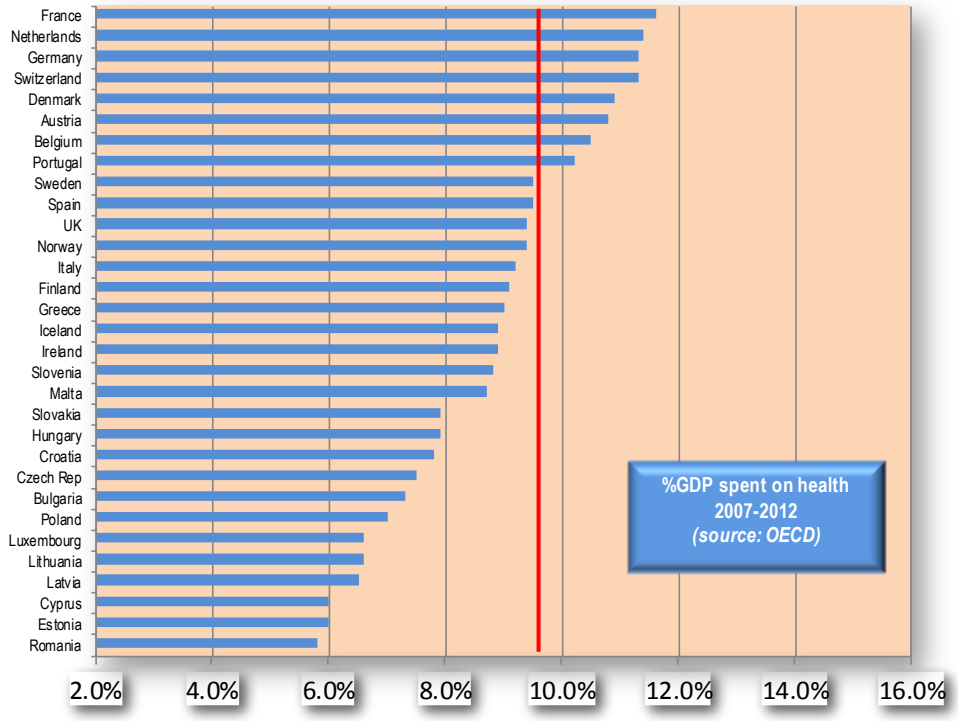
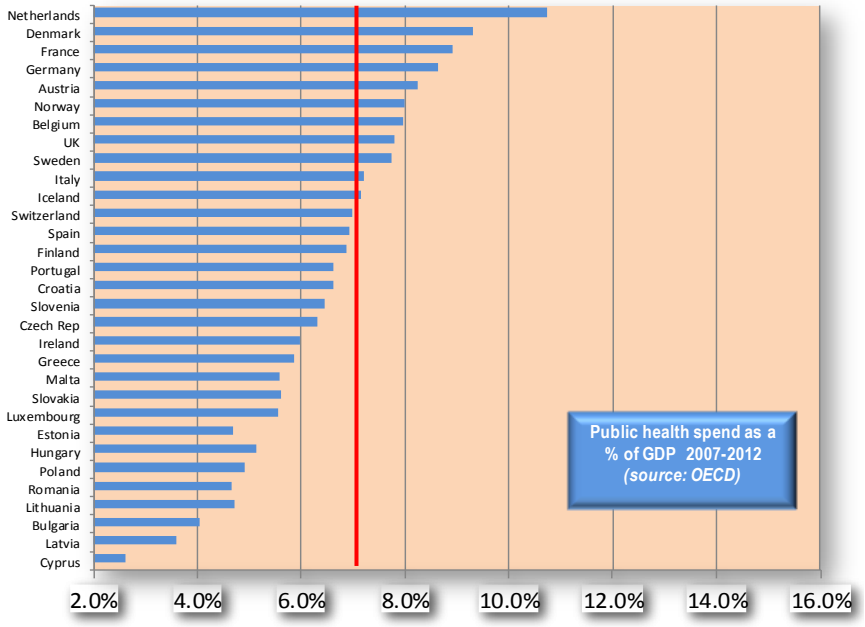


Chart 3 - Percentage of GDP spent on health by each country in 2007-12

Source OECD in 2007-12[22]

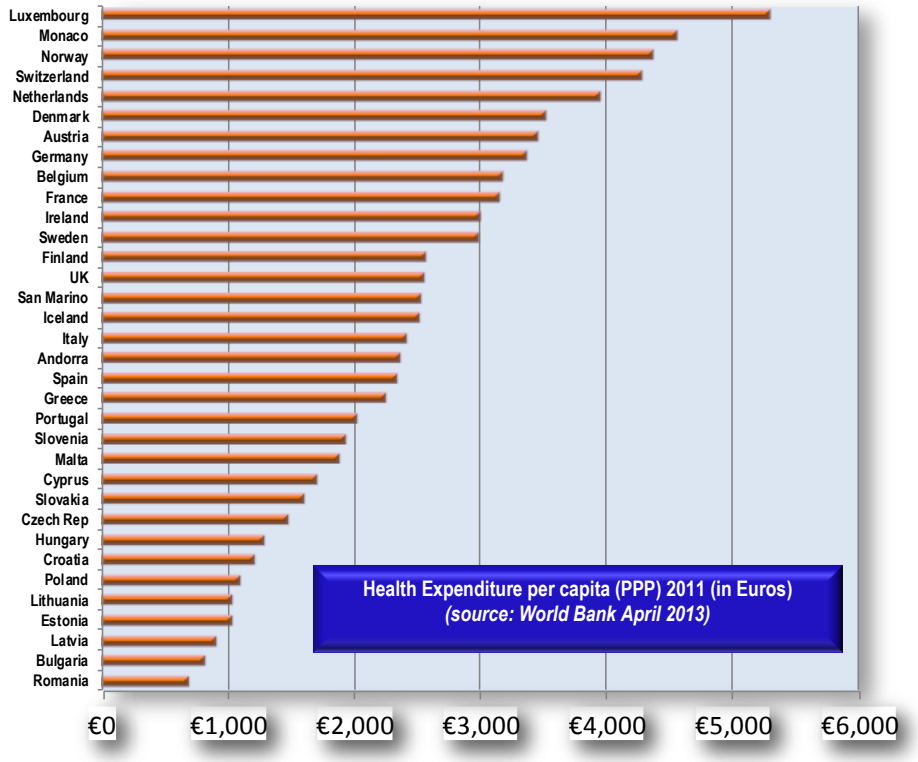
An attempt was made to compare expenditure on overall healthcare in countries, with reported spending on dentistry, but this was not possible as the interpretation of what constitutes spending on dentistry varied significantly. Some countries provided data for state spending only (as there was no data for spending by private patients) and some were unable to supply overall spending data.

Chart 4 - Percentage of GDP spent on health by governments in 2007-12



[22] nb: the percentages refer to different years recorded for each country, with the oldest at 2007 (Estonia) and the newest at 2012 (several countries); no data for Liechtenstein was supplied

Chart 5 – Spending per capita on health



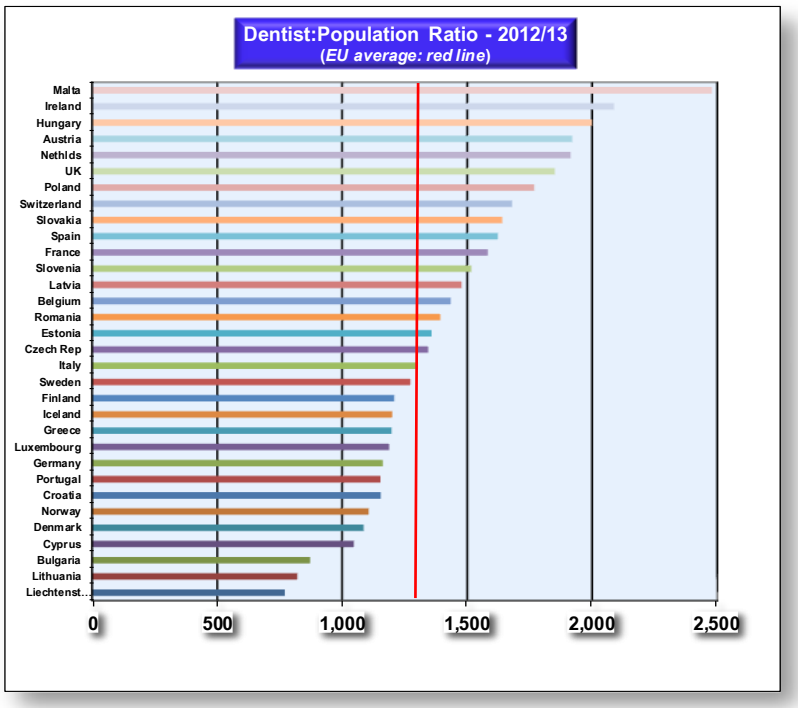
The World Bank has published data about individual spending per capita: this almost matches tables of GDP at PPP in each country.

Population Ratios

One measure of the provision of dentistry/oral healthcare in countries is the *dentist to population ratio*. However, some caution should be employed when using these figures, as there are a number of factors which might skew the conclusions.[23]

The population of the areas covered by this Manual was about 518 million in 2013[24]. The dental associations reported that there were about 361,000 ***active*** dentists – which excludes, for example, dentists totally retired or on maternity leave (but still registered) - see Part 7, Workforce. This leads to an (average) dentist to population ratio of 1:1,433. The equivalent figures for 2008 were 345,000 and 1:1,501 respectively, so there has been a small drop in "workload" for dentists. However, there were wide variations from this figure:

Chart 6 - (Active) Dentist to Population ratio



See Part 7 (The Dental Workforce) for numbers.

[23] A number of factors may make the interpretation of population ratios hazardous – eg what proportion of dentists are female (female dentists are described by many commentators as having a smaller working life "output"), the level of support given by clinical auxiliaries, whether dentists have chairside support from dental assistants and other factors.

[24] Population figures derived from Eurostat – but dates are various in the period 2011-13

Entitlement and access to oral healthcare

In all countries of the EU/EEA oral healthcare is available through private practice, using "liberal" or "general" practitioners. Although entitlement for all to receive state or insurance funded health care is a constitutional right in some countries and a stated principle in others, it is rarely guaranteed.

For the majority of the population in Europe access to oral health care is determined by:

- the geographical proximity of 'private' dental practitioners;
- the level of fees charged to patients for different treatments; and
- access by particular population groups (for example children) to special services.

Where governments or other agencies offer financial assistance, or directly provide services, for particular population groups who would otherwise not receive care, this is always a restricted "standard package" of care. The standard package often only consists of basic conservative treatments (examination, fillings), exodontia and some preventive care, but usually excludes all complex treatments (including, in many countries, emergency care following an accident). There is some evidence from individual countries that the content of the standard package has been reduced since 2000, with a consequent increase in co-payments.

Financing of oral healthcare

In every country examined, dental care is typically funded by direct patient payments to a greater extent than other areas of general health care. In most countries the reliance on, and acceptance of, direct patient payments, especially for adults or those with an income is exceeded only by that of the cost of drugs or payments for optometrists' services.

While patient payments (or co-payments) for state or insurance funded dental care are widely accepted across Europe, every country also has a system (or systems) where individuals pay prospectively for their dental care, through insurance or taxation (or both). This system is usually a part of, or closely reflects, the system of funding for general health care. There is no identified "model" system, except perhaps for general oral health care for the adult population, where some form of "social insurance" system is the most widely used.

Almost all countries have a specific alternative system which enables individuals to collectively pay for some of the costs of oral health care. These systems range from national social security systems or health services, state recognised or compulsory health insurance (from "sick funds"), to voluntary insurance from private companies. Additionally, in every country there is some form of financial assistance, subsidy or special services for population groups who cannot afford to pay directly or collectively for dental care, or have special oral health needs (such as children, the unemployed, handicapped people, hospital inpatients or war veterans). As children are not in a position to earn an income and pay for their own dental care, they most commonly have the best access to free or subsidised care. Indeed, in countries with a national health service or a state-organised social security system, the publicly funded dental service is primarily for schoolchildren. In the other countries children generally only receive subsidised dental treatment if they are covered by a parent's sick fund or private insurance.

It is important to note that whatever the actual route by which individuals indirectly pay for their dental care, the administrative mechanisms employed to keep dental care affordable (for instance, fixed fees), appropriate (for example, prior approval) and profitable to the private dentist, flexible, periodically negotiated fee-scales are common to many systems. In the countries where direct patient payments are the dominant form of finance, there is typically a limited social security system.

For the patient, the cost of care is further complicated by the varying size of subsidy offered for different treatments. At one extreme, individual dentists may contract with individual insurance schemes to provide certain care at certain prices. However, in other countries there is a nationally negotiated agreement between representatives of the dental profession - the providers of care - and the purchasers of care, whether they are a union of sick funds, or the government.

There appear to be four models of provision of healthcare, which are examined in more detail in Annex 4.

Frequency of attendance

The decision about the frequency of attendance of patients to receive oral health re-examinations is largely a decision between dentists and their individual patients. However, there are a number of influences on these decisions, which may include individual and population disease levels, preventive strategies (including water fluoridation), socio-economic and cultural attitudes and external funding arrangements.

We received estimates of patient normal re-attendance from most countries (many others reported that there was no measurable average attendance).

All countries made the point that patients with active disease may be seen more frequently than the normal time period reported. In almost every European country, the overall levels of expenditure and the amount of care provided is directly influenced by the regulations which govern patients' fees and private dentists' remuneration. Because of the dominance of "private practitioners" in oral health care provision, regulations about patient payments, fixed remuneration fees, and subsidy systems all affect the dentist's incentive to treat and the patient's incentive to seek treatment.

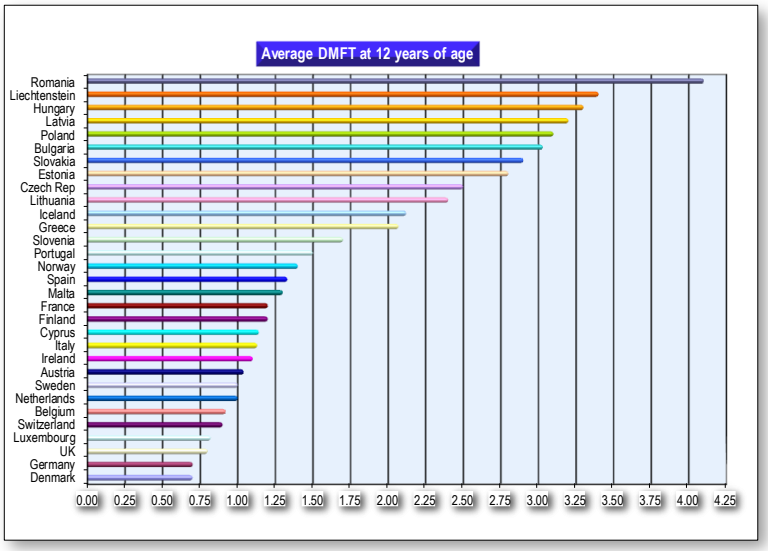
Approximately 6 monthly	The Czech Republic, Malta and Poland
9 to 12 monthly	Denmark, Estonia, the Netherlands, Slovenia and Switzerland
Annual	Austria, Belgium, Cyprus, France, Germany, Hungary, Ireland, Italy, Latvia, Luxembourg, Norway, Romania and the UK
18 months or more	Finland, Iceland, Slovakia and Sweden

Table 1 - Patient re-examination periods

Some of these figures actually represent an average where, for example, the country reported that the usual pattern of attendance was "every 12 to 18 months".

Health Data

Chart 7 – The average Decayed, Missing, Filled Teeth at the age of 12 years (DMFT)



Unfortunately, health data is not collected by countries in a uniform manner on fixed dates, so comparison between the data published by individual countries is difficult and should be viewed with circumspection.

However, many countries do collect data on 3 fixed items and publish these through various sources (see the individual country sections for sources and dates of collection).

Chart 8 – The proportion of children of 12 years of age with no DMFT

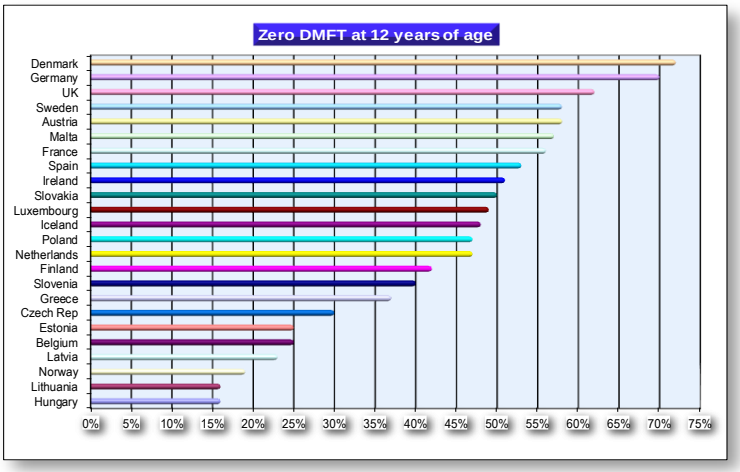
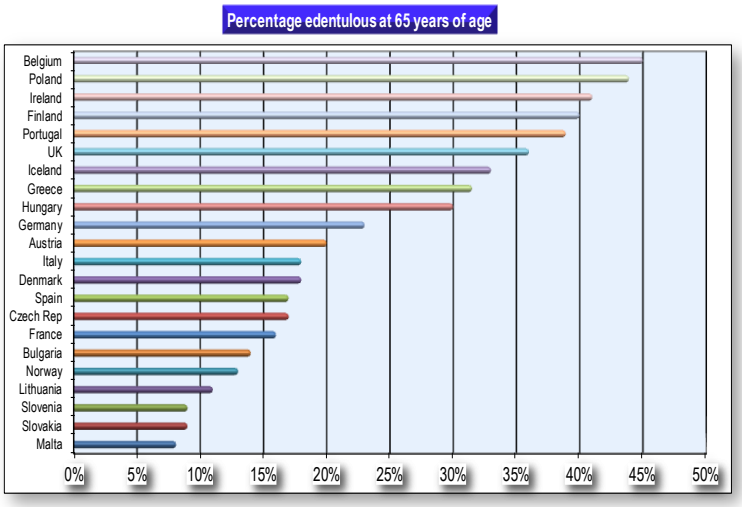


Chart 9 – The proportion of adults 65 years (or older) with no teeth (edentulous)



Fluoridation

Table 2 - Community fluoridation

Community Fluoridation	
Austria	None
Belgium	Some natural
Bulgaria	Milk fluoridation schemes
Croatia	None
Cyprus	Some natural
Czech Rep	Salt fluoridation
Denmark	Some natural
Estonia	None
Finland	None
France	Salt and free toothpaste
Germany	Salt fluoridation
Greece	None
Hungary	Artificial public water fluoridation
Iceland	None
Ireland	Artificial public water fluoridation
Italy	Natural fluoridation and free toothpaste
Latvia	Free tablets and toothpaste for children at risk
Liechtenstein	None
Lithuania	None
Luxembourg	None
Malta	Some natural, plus free toothpaste scheme
Netherlands	None
Norway	None
Poland	Some natural
Portugal	Some free toothpaste schemes
Romania	None
Slovakia	Salt fluoridation
Slovenia	Some natural
Spain	Artificial public water fluoridation + natural in Canary Islands
Sweden	Some free toothpaste schemes
Switzerland	Salt fluoridation
UK	Natural and public fluoridation and free toothpaste

Fluoride is a substance which gives protection to teeth against tooth decay, if ingested in optimal quantities, or applied to the surface of the teeth by means of toothpaste or other methods.

Fluoride may be found naturally at optimal or suboptimal levels in water supplies or in some countries (Hungary, Ireland, Spain and the UK by the addition of fluoride to the water supplies).

Other methods for providing fluoride for systemic ingestion are milk (Bulgaria), tablets (Latvia) and salt (the Czech Republic, France, Germany, Slovakia and Switzerland). Many countries provide free fluoride toothpaste for those at risk of decay, especially children.

Part 5: The Education and Training of Dentists

The content of the education and training necessary, and the titles of qualified dentists, are as described in the PQD.

The separate recognition and training of dentists is now a reality in all countries of the EU/EEA. The existence of a class of dentists (often known as stomatologists), who were originally trained as medical doctors is also an historical legacy in Austria, France, Italy, Spain and Portugal, and most of the countries which joined in the years after 2004 - but for all of these countries membership of the EU has brought substantial changes in dental education.

Table 3 – Dental schools, numbers of students and gender

	Year	No of schools	Public	Private	Annual intake	Annual graduates	Percentage female	No of females	Course duration
Austria	2013	4	3	1	165	119	65%	77	6 years
Belgium	2012	5	5	0	NK	158	80%	126	5 years
Bulgaria	2012	3	3	0	350	290	50%	145	5.5 yrs
Croatia	2013	3	2	1	148	113	69%	78	6 years
Czech Rep	2012	5	5	0	280	250	38%	95	5 years
Denmark	2012	2	2	0	162	120	76%	91	5 years
Estonia	2013	1	1	0	32	30	87%	26	5.5 yrs
Finland	2013	4	3	1	186	100	68%	68	5 years
France	2011	16	16	0	1,154	917	55%	504	6 years
Germany	2012	30	29	1	2,222	1,813	62%	1,122	5.5 yrs
Greece	2012	2	2	0	250	275	62%	171	5 years
Hungary	2013	4	4	0	310	245	58%	142	5 years
Iceland	2012	1	1	0	7	7	69%	5	5 years
Ireland	2013	2	2	0	86	68	54%	37	5 years
Italy	2013	34	32	2	984	883	47%	415	5 years
Latvia	2012	1	1	0	35	32	87%	28	5 years
Lithuania	2013	2	2	0	161	161	83%	134	5 years
Malta	2013	1	1	0	8	8	38%	3	5 years
Netherlands	2013	3	3	0	243	268	57%	153	6 years
Norway	2013	3	3	0	153	138	75%	104	5 years
Poland	2013	10	10	0	1,231	809	80%	647	5 years
Portugal	2012	7	3	4	716	553	66%	365	5 years
Romania	2013	10	8	2	1,800	1,700	70%	1,190	6 years
Slovakia	2013	4	2	2	117	101	60%	61	6 years
Slovenia	2012	1	1	0	70	50	70%	35	6 years
Spain	2012	17	12	5	1,379	1,379	67%	924	5 years
Sweden	2012	4	4	0	339	200	63%	126	5 years
Switzerland	2013	4	4	0	128	103	60%	62	5 years
UK	2013	16	16	0	1,100	1,052	56%	589	5 years
	2013	**199**	**180**	**19**	**13,816**	**11,942**		**7,522**	
			90%	**10%**			**63%**		
	2008	**196**	**176**	**20**	**14,401**	**11,582**			
			90%	**10%**			**61%**		
	2003	**184**	**174**	**10**	**10,969**	**8,665**			
			95%	**5%**			**53%**		

the secondary school leaving examination or matriculation determine the entry into dental school.

Dental Schools

Cyprus, Liechtenstein and Luxembourg do not have dental schools and rely on other EU/EEA trained dentists for their workforce.

Across the EU/EEA, all dental undergraduate education and training takes place in universities – usually in Colleges or Faculties of Medicine or Dentistry.

In 2013, there were 200 dental schools in the EU/EEA – up from 184 in 2003. In each of Estonia, Iceland, Latvia, Malta and Slovenia there was only one school, whereas in Italy there were 35 and 30 in Germany. However, although most were publicly funded, many of these dental schools charge course fees to their students.

Additionally, 9% of schools were wholly privately funded – these were in Austria, Croatia, Finland, Germany, Italy, Portugal, Romania and Spain. No public funding supported these institutions.

In 2013, in the dental schools of the EU/EEA, there were over 70,000 dental students in training. Approximately 12,000 graduate each year (63% female – up from 53% in 2003).

In half of EU/EEA countries entrance into dental school is by means of a competitive examination – with a strict *numerus clausus* (restriction) on the numbers. In some countries this examination is at the end of the first year of training. In the remaining countries the results of

In France, access to dental faculties is by competitive examination at the end of the first year (common to medicine, dentistry, pharmacy and midwifery) and the subsequent 5-year dental course follows. The UK has three "graduate-entry" dental schools. Entrants must have a primary degree in biological sciences.

Annually, over 13,600 enter into dental schools as undergraduates and across the EU/EEA on average about 84% of that number eventually graduate as dentists.

Undergraduate education and training

Mutually recognised diplomas guarantee that, during the complete training programme, the student has acquired:

- adequate knowledge of the sciences on which dentistry is based and a good understanding of scientific methods, including the principles of measuring biological functions, the evaluation of scientifically established facts and the analysis of data;
- adequate knowledge of the constitution, physiology and behaviour of healthy and sick persons as well as the influence of the natural and social environment on the state of health of the human being, insofar as these factors affect dentistry;
- adequate knowledge of the structure and function of the teeth, mouth, jaws and associated tissues, both healthy and diseased, and their relationship to the general state of health, and to the physical and social well-being of the patient;
- adequate knowledge of clinical disciplines and methods, providing the dentist with a coherent picture of anomalies, lesions and diseases of the teeth, mouth, jaws and associated tissues and preventive, diagnostic and therapeutic dentistry;
- Suitable clinical experience under appropriate supervision.

Whilst most teaching takes place in the language of the relevant country, about one third of all EU/EEA countries teach their undergraduates in English for all or part of the curriculum.

The duration of training

The criteria described below are the minimum training requirements. A Member State may impose additional criteria for qualifications acquired within its territory. It may not, however, impose them on practitioners who have obtained recognised qualifications in another Member State.

Duration

A complete period of undergraduate dental training consists of a minimum 5 year full-time course of theoretical and practical instruction, for a minimum of 5,000 hours, given in a university, in a higher-education institution recognised as having equivalent status or under the supervision of a university. In 10 countries basic dental training is for more than 5 years:

Table 4 – Undergraduate Training greater than 5 years

Austria	Germany
Bulgaria	Netherlands
Croatia	Romania
Estonia	Slovakia
France	Slovenia

Post-qualification education and training

Vocational Training

In the 2009 Manual it was reported that about half of all EU/EEA countries insisted on further post-qualification vocational training (VT) for their new graduates, before they were given full registration, or entitlement to independent practice, or entitlement to participation in the state oral healthcare system as independent clinicians.

Table 5 – Post-Qualification Vocational Training

Belgium	Full	12m
Croatia	Full	12m
Slovenia	Full	12m
Germany	NHS only	24m
Switzerland	NHS only	24m
UK	NHS only	12m

By 2013, only Belgium, Croatia and Slovenia had this as a requirement for full registration for independent practice – all with 12 months' VT programmes. Poland's VT ends with those graduating in 2016. Germany and Switzerland (both 24 months) and the UK (12 months) have this as a requirement only for those working in their state healthcare systems.

The nature of VT means that usually the training of the new graduate takes place in a "sheltered" environment, under the direction or supervision of an experienced dentist. There may, or may not be parallel formal learning, in an educational establishment such as a dental school and there may be a final "completion" examination.

The requirement to complete VT is not applicable to dentists from other EU/EEA Member States who hold the evidence of formal qualifications, subject to automatic recognition under the PQD.

Continuing Education and Training

Every EU and EEA country has at least an ethical obligation for dentists to undertake continuing professional education of some kind – and some arrangements to deliver this (see table 4 overleaf).

Table 6 – Continuing Professional Development (Education)

	Mandatory	Partially Mandatory	Requirements	Not mandatory but formal systems	Not mandatory	Comments
Austria					Obligation only	
Belgium	Yes		60 hours in 6 years			Re-registration required after 6 years
Bulgaria	Yes		30 hours in 3 years			
Croatia			7 hours per year			
Cyprus**	Yes		45 hours in 3 years			
Czech Rep	Yes					Certificates of proficiency leads to higher fees from health systems
Denmark**		Yes	10 hours per year			Required only of DDA members
Estonia				Yes		
Finland				Yes		
France**	Yes		1.5 days per year			
Germany		Yes	125 points in 5 years			Required for recertification for sick funds, only (not private)
Greece					Obligation only	
Hungary	Yes		250 hours in 5 years			
Iceland		Yes	75 hours in 3 years			Only mandatory for those treating children in the system
Ireland			250 hours in 5 years	Yes	Obligation only	
Italy	Yes		150 hours in 3 years			Minimum 30 and maximum 70 hours per year
Latvia	Yes		250 hours in 5 years			
Liechtenstein						No information
Lithuania	Yes		120 hours in 5 years			
Luxembourg					Obligation only	
Malta				Yes		
Netherlands					Obligation only	
Norway**		Yes	150 hours in 5 years			Only mandatory for NDA members
Poland	Yes		200 hours in 4 years			
Portugal				Yes		
Romania	Yes		200 hours in 5 years			
Slovakia	Yes		250 hours in 5 years			
Slovenia	Yes		75 hours in 7 years			Followed by an examination
Spain				Yes		
Sweden					Obligation only	
Switzerland	Yes		10 days per year			Failure leads to lower fees.
UK	Yes		250 hours in 5 years			75 hours has to be provable (verifiable)
** changed since 2009 Manual						

In 2004 only 10 countries had a mandatory requirement to undertake a minimum amount of such training. By 2008, this had increased to 17 countries. In 2013, 16 countries had a mandatory requirement, with another 3 having a partial (qualified) requirement. Additionally, 6 countries, whilst not having a mandatory requirement, did have formal systems in place.

Specialist Training

Specialists, as defined in the EU Directives, are recognised in most countries of the EU/EEA. Orthodontics and Oral Surgery (or Oral Maxillo-facial Surgery), are the two specialties which are usually recognised, but not in Austria, Luxembourg and Spain, where there is no recognition of specialists. However, in Austria, Belgium, France and Spain, Oral Maxillo-facial Surgery is recognised as a medical specialty (only), under the EU Medical Directives.

Many other specialties have *de facto* recognition in various ways in different countries (for example by formal training programmes), but these may not be formally recognised under the PQD.

There is no specialist training in Austria, Cyprus, Iceland, Luxembourg, Malta and Spain. See the individual country sections to note the arrangements for training in Cyprus, Iceland and Malta, where specialists are recognised.

Training in specialised dentistry involves a full-time course of a minimum of three years' duration supervised by the competent authorities or bodies.

Such training may be undertaken in a university centre, in a treatment, teaching and research centre or, where appropriate, in a health establishment approved for this purpose by the competent authorities or bodies. The trainee must be individually supervised. Responsibility for this supervision is placed upon the establishments concerned.

European Dental Education

The EU Directorate General for Education and Culture funded an innovative pan-European project DentEd, to promote a common approach to dental education across Europe. Over six years many dental schools in the EU (including candidates for admission to the EU) received advice and peer support from visiting teams of dental academics, supported by several international conferences on trends and strands in dental curricula. Work on dental education is continuing through the Association for Dental Education in Europe (ADEE).

The Bologna Process

The Bologna Process was launched in 1999 as the "Bologna declaration", when the education ministers of some 40 countries expressed the desire to create a European Higher Education Area (EHEA). The goal was that it should be easy for students to move from one country to another within the Area and that European higher education should be made more attractive to non-European prospective students. The EHEA has been in place since 2010 – and by 2014 it covered 49 higher education systems in 47 countries (both Belgium and the UK are considered to have two systems).

Amongst the proposals was the adoption of a system essentially based on the splitting of the curriculum into two main cycles – undergraduate (Bachelor) and graduate (Master). Access to the second cycle is intended to require successful completion of first cycle studies, lasting a minimum of three years. The degree awarded after the first cycle would need to be relevant to the European labour market as an appropriate level of qualification. The second cycle should lead to the master and/or doctorate degree, as in many European countries. By 2014, some countries had split their programmes, while others have retained them.

The EHEA is not based on an international treaty, but most of the signatory countries have also signed and ratified the Lisbon Recognition Convention covering academic qualifications. The European Commission is a member of the Bologna Follow-Up Group, along with higher education stakeholder organisations operating at European level, as well as the 49 ministers of higher education. The EHEA is based on shared practice in such areas as quality assurance, qualifications frameworks, curriculum design, student and staff mobility. The official EHEA website is at http://www.ehea.info/

Recognition of professional qualifications, however, falls within the scope of EU legislation, at least for the EU/EEA Member States under EU Directive 2013/55/EU. Besides its major innovations (the European Professional Card and the alert mechanism) it is notable for the extent to which it has begun to accommodate the principles and instruments of the EHEA: in particular, the European Credit Transfer and Accumulation System (ECTS), the European Qualifications Framework (EQF), and competence-based curricula.

The European University Association (EUA) has published a briefing on the HE-related aspects of the Directive. It is available at:

http://www.eua.be/eua-work-and-policy-area/building-the-european-higher-education-area/bologna-and-professional-qualifications.aspx

Part 6: Qualification and Registration

All countries of the EU/EEA require registration with a competent authority – more frequently this authority is separate from the dental association, and may be government appointed.

To legally practise in each country a basic qualification is always required (degree certificates), but a certain amount of vocational experience, evidence of EU citizenship, a letter of recommendation from a dentist's current registering body and sometimes evidence of insurance coverage may be necessary. When examining the situation in a particular country it is important to distinguish legal registration to practise in any capacity (usually with government department or agency, sometimes as a 'licence') from registration with a social security or social insurance scheme. Where registration is with the national dental association or another non-governmental body a private practitioner may also require a 'licence to practise' from a government ministry. Registration with social security or insurance schemes will often depend on different criteria, and may also entail linguistic, contractual as well as ethical obligations.

For details in each country please see the relevant country section of the Manual.

The Use of Academic Titles

Provided that all the conditions relating to training have been fulfilled, holders have the right to use their lawful academic title or, where appropriate, its abbreviation, in the language of the Member State of origin or the State from which they come. Some Member States may require this title to be followed by the name and location of the establishment or examining board which awarded it.

In some cases, the academic title can be confused in the host State with a title for which additional training is necessary. In that event, the host State may require that different, suitable wording be used for the title.

Good character and good repute

For the purposes of temporary provision of services by dentists, in the event of justified doubts, competent authorities of a host Member State may ask the competent authorities of the Member State of establishment to provide information about the good conduct or the absence of any disciplinary or criminal sanctions of a professional nature against the health professional, as well as any information relevant to the legality of his/her establishment.

In the case of an application by a dentist for establishment in another Member State, the host Member State may demand, when deciding on the application documents produced by the competent authorities in the home Member State, other documents: that they are of good character or repute, or that they have not been declared bankrupt, or that they have not been suspended or prohibited from pursuing the profession, in the event of serious professional misconduct or a criminal offence.

Where the competent authorities of the home Member State does not issue such documents, they may be replaced by a declaration on oath or a solemn declaration. The host Member State may also require, in the event of justified doubts from the competent authorities of the home Member State, confirmation that the applicant is not suspended or prohibited from the pursuit of the profession as a result of serious professional misconduct, or conviction of criminal offences relating to the pursuit of any of his/her professional activities.

Language

The December 2013 PQD does give Host Countries the right to conduct language tests, for example, when patient safety is an issue. The survey carried out for this Manual indicates that some countries anticipated this change to the Directive and introduced language testing prior to registration, using Patient Safety as the reason for this.

Thus, Member States may require migrants to have the knowledge of languages necessary for practising the profession. So, for example an employer (such as an NHS system) can insist on the necessary language skills prior to registration with the employing authority. But, this provision must be applied proportionately, which rules out the systematic imposition of language tests before a professional activity can be practised.

Serious professional misconduct and criminal penalties

The same procedure is followed in the case of serious professional misconduct and conviction for criminal offences. The existing rules (in the 2005 PQD) provided for detailed obligations for Member States to exchange information. So, the Member State of origin or from which the person comes must forward to the host MS all the necessary information about any disciplinary action which has been taken against the practitioner concerned, or criminal penalties imposed on him/her.

The amended PQD reinforces the obligations. From 2014, competent authorities of Member States will have to proactively alert the authorities of other Member States about professionals who are no longer entitled to practise their profession due to a disciplinary action or criminal conviction, through a specific alert mechanism. If the host Member State has detailed knowledge of a serious problem before registration, it must inform the Member State of origin or the Member State from which the person came. The procedure, which then follows, is the same as that which governs good character and good repute.

Physical or mental health

Some Member States require dentists wishing to practise to present a certificate of physical or mental health. Where a host Member State requires such a document from its own nationals, it must accept as sufficient evidence the document required in the Member State of origin or the Member State from which the person comes.

Where the Member State of origin or from which the person comes does not require a document of this nature, the host MS must accept a certificate issued by a competent authority in that State, provided that it corresponds to the certificates issued by the host MS.

Duration of the authorising procedure

The procedure for authorising the person concerned to work as a dental practitioner must be completed as soon as possible and not later than three months after presentation of all the documents, unless there is an appeal against any unsuccessful application.

If there are any doubts about the good character, good repute, disciplinary action, criminal penalties, or physical or mental health of the applicant, a request for re-examination may be made which suspends the period laid down for the authorisation procedure. The Member State should give its reply within three months.

In the absence of a reply, leading to failure to reach a decision by the host Member State within the three month deadline, the applicant has the right to appeal under national law.

Alternative to taking an oath

Some Member States require their nationals to take an oath or make a solemn declaration in order to practise. Where such oaths or declarations are inappropriate for the individual, the host Member States must ensure that an appropriate and equivalent form of oath or declaration is offered to the person concerned.

Table 7 - Regulation of dentists (2013)

REGULATION OF DENTISTS IN 2013

	Name of regulator	Cost per annum (2013)
Austria	Austrian Dental Chamber via their regional organisations	% of income
Belgium	Federal Ministry of Health	€ 550
Bulgaria	Bulgarian Dental Association by means of its Regional Colleges.	€ 77
Croatia	Croatian Dental Chamber	No fee
Cyprus	Cyprus Dental Council & Cyprus Dental Association	€35 + €130
Czech Rep	Czech Dental Chamber and the Regional Authority*	Included in annual sub
Denmark	Health and Medicines Authority	No fee
Estonia	Healthcare Board/General Dental Council, within the Commission for Licence	€ 13
Finland	National Authority for Medicolegal Affairs	No annual fee
France	Ordre National	€ 398
Germany	Kassenzahnärztliche Vereinigungen (KZV)	Included in annual sub
Greece	Ministry of Health and Social Solidarity and Regional Dental Society	Variable according to region
Hungary	Ministry of Health	No fee
Iceland	The Ministry of Health and Social Security	€ 52
Ireland	Irish Dental Council	€ 200
Italy	Federazione Ordini dei Medici Chirurghi e degli Odontoiatri	Variable according to region
Latvia	Health Inspectorate by order of the Ministry of Health	No fee
Liechtenstein	Amt für Gesundheitsdienste, a public authority	€ 820
Lithuania	The Licensing Committee at the Lithuanian Dental Chamber	€19 + €58
Luxembourg	Ministry of Health	€ 275
Malta	Medical Council. Until 2011 overseas dentists need a work permit.	€ 35
Netherlands	Ministry of Public Health Welfare & Sport - also, the BIG register	€ 80
Norway	Norwegian Registration Authority for Health Personnel (SAK)	€ 200
Poland	The Regional Chamber of Physicians and Dentists (Okręgowa Izba Lekarska).	None
Portugal	The Ordem dos Médicos Dentistas (OMD)	Variable €250 to €1,000
Romania	Romanian Collegiums of Dental Physicians	Only initially
Slovakia	The Slovak Chamber of Dentists	€ 4
Slovenia	The Medical Chamber of Slovenia	No fee
Spain	Regional colegios (central list held at Consejo General in Madrid)	Variable €216 to €600
Sweden	National Board of Health and Welfare unit for Qualification and Education	€ 77
Switzerland	Federal Board but registers kept by each of the 26 Cantonal authorities	No fee
UK	General Dental Council	€ 685

* Dentists qualified outside the CR must register (free) with the Ministry of Health

Part 7: Dental Workforce

The dental workforce provides oral healthcare and includes dentists, clinical dental auxiliaries and other dental auxiliaries. In some countries stomatologists or odontologists still exist (for a description of these two classes, see later).

In all countries, whatever classes of dental auxiliaries exist, most oral healthcare is provided by dentists. The description of what a dentist may provide is regulated by Member States. However, in relation to the Freedom of Movement, and the desire of professionals to practise in another Member State, please see Part 3 (the Professional Qualifications Directive) for more information.

The regulations relating to dental auxiliaries are less circumscribed. So, the permitted duties of such as dental chairside assistants (nurses), hygienists, therapists and clinical dental technicians may vary from country to country. However, in all countries, dental technicians do not provide services directly to patients, except for the provision of repairs to prosthodontic appliances which do not need intervention orally (see dental auxiliaries).

Dentists

The numbers of dentists in each country is known as in every one there is a legal requirement to register with a competent authority.

	Year of data	Population	Number Registered	Female	Number Active	Female
Austria	2013	8,489,482	4,820	42%	4,421	42%
Belgium	2011	11,153,405	8,879	48%	7,777	48%
Bulgaria	2013	7,282,041	8,350	66%	8,350	66%
Croatia	2007	4,475,611	4,537	65%	3,875	65%
Cyprus	2013	865,878	1,073	49%	827	65%
Czech Rep	2012	10,516,125	9,354	65%	7,821	65%
Denmark	2013	5,605,836	7,989	58%	5,161	83%
Estonia	2013	1,324,814	1,615	87%	1,250	87%
Finland	2013	5,434,357	5,925	69%	4,500	69%
France	2012	65,657,000	41,505	40%	41,505	40%
Germany	2012	80,523,746	88,882	42%	69,236	42%
Greece	2013	10,772,967	14,125	47%	9,000	47%
Hungary	2013	9,906,000	5,500	57%	4,973	57%
Iceland	2012	322,930	351	33%	269	33%
Ireland	2013	4,591,087	2,627	44%	2,200	44%
Italy	2012	59,685,227	58,723	34%	45,896	34%
Latvia	2012	2,178,443	1,724	87%	1,474	87%
Liechenstein	2013	37,009	57		48	
Lithuania	2013	2,962,000	3,660	83%	3,610	83%
Luxembourg	2008	537,000	512	40%	452	40%
Malta	2013	421,364	230	36%	170	36%
Netherlands	2013	16,789,800	10,780	35%	8,773	35%
Norway	2013	5,063,709	5,350	47%	4,576	47%
Poland	2012	38,533,299	33,633	78%	21,800	78%
Portugal	2012	10,487,289	9,097	57%	9,097	57%
Romania	2013	20,057,458	15,500	68%	14,400	68%
Slovakia	2013	5,410,728	3,357	61%	3,298	61%
Slovenia	2013	2,060,253	1,762	63%	1,358	63%
Spain	2012	47,059,533	31,261	52%	29,000	52%
Sweden	2010	9,580,424	14,454	52%	7,528	52%
Switzerland	2013	8,058,100	4,850	28%	4,800	28%
UK	2013	63,887,988	40,156	45%	34,534	45%
EU/EEA Totals		**519,730,903**	**440,638**		**361,979**	**49%**

Table 8 - Numbers of dentists

Despite the continued increase in the numbers, across the EU, many dental associations report that the geographical distribution remains uneven, with people in rural areas often having large distances to travel to the nearest dental practice. Formal incentive schemes are rare, and more commonly a rural community will create an opportunity itself to attract a dentist.

Also, in some countries, for example Germany, there are geographical manpower controls, using incentives for setting up new practices.

The total number of registered dentists in the EU/EEA in 2013 was about 440,000 (400,000 in 2008).

The number of "active dentists"

"Active dentists" refers to dentists who remain on their country's register or other such list of dentists who practise in a clinic, general practice, hospital department, administrative office or university. The difference between the number of dentists in a country and the "active dentists" should represent those dentists who are retired or no longer undertake any form of dentistry including administrative dentistry.

Some countries are unable to assess how many of these dentists are "active", so accurate figures for the number of such dentists are difficult to assess. But, from the information provided we estimate that about 361,000 dentists were active in 2013 (345,000 in 2008). So, whereas the number of registered dentists has increased by 10%, the number "active" has only increased by 4.6%.

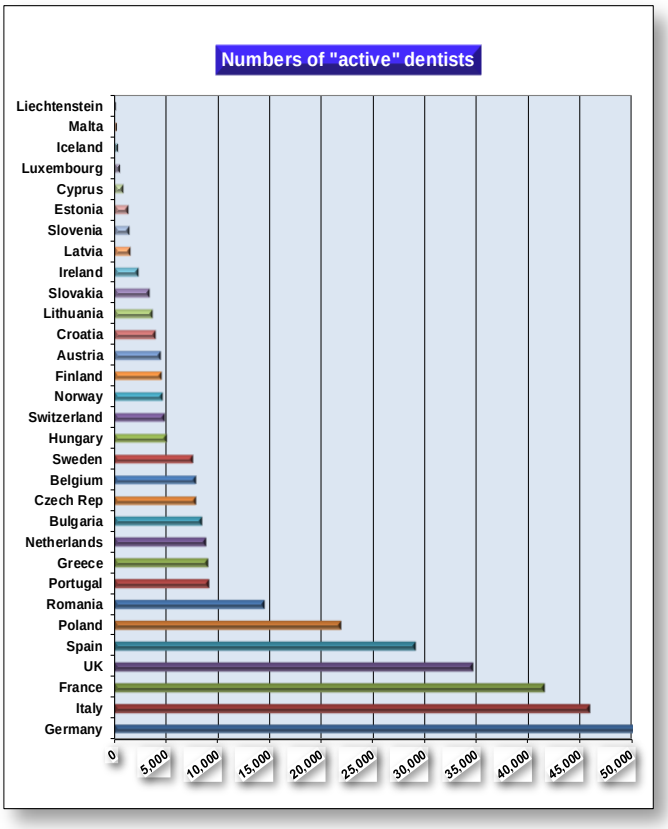


Chart 10 – The number of "active dentists" in each country

Table 9 - Gender of dentists - percentage female

Latvia	87%	Belgium	48%
Estonia	87%	Cyprus	49%
Lithuania	83%	Greece	47%
Poland	78%	Norway	47%
Finland	69%	UK	45%
Romania	68%	Austria	42%
Bulgaria	66%	Germany	42%
Czech Rep	65%	France	40%
Croatia	65%	Iceland	33%
Slovenia	63%	Italy	34%
Slovakia	61%	Ireland	44%
Hungary	57%	Luxembourg	40%
Portugal	57%	Nethlerlands	35%
Spain	52%	Malta	36%
Denmark	58%	Switzerland	28%
Sweden	52%		

The Gender Mix of Practising Dentists

The change of gender balance in some countries, with the increase in proportion of female dentists who historically are said to be unable to work for as many hours as males, also alters the measure of whole-time working equivalence of the total number of dentists, even with the increased total numbers.

Across the EU/EEA 49% of active dentists are female, but with wide variations. Generally, but not exceptionally, countries with strong public dental services (the Eastern European and Nordic countries) had higher numbers of female dentists – nearly 90% in Latvia – down to 28% in Switzerland.

However, the trend is very much to an increase of females as a proportion of the dentist population. When the figures were last measured (2008) about 46% of dentists were female. There have been marked increases in several countries. For example, the proportion of females is up from 33% to 52% in Norway, 34% to 45% in the UK and 36% to 40% in France.

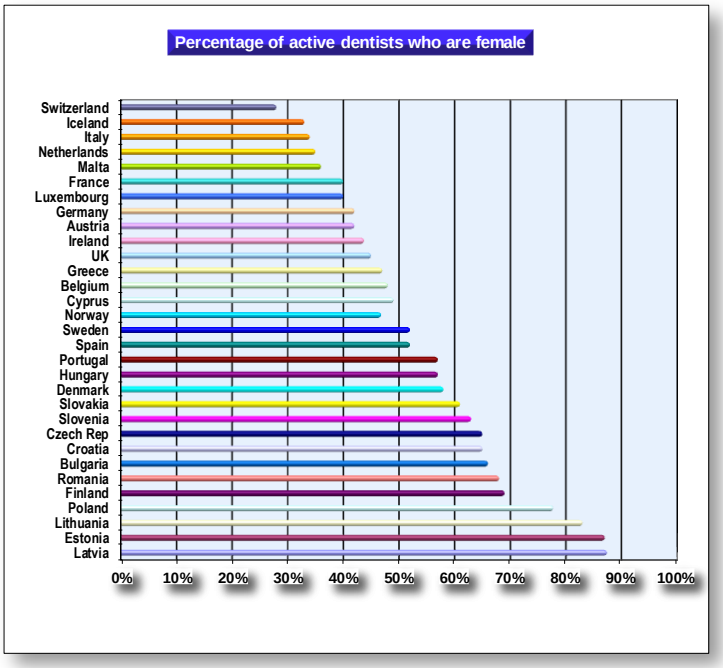


Chart 11 – The gender of "active dentists" in each country

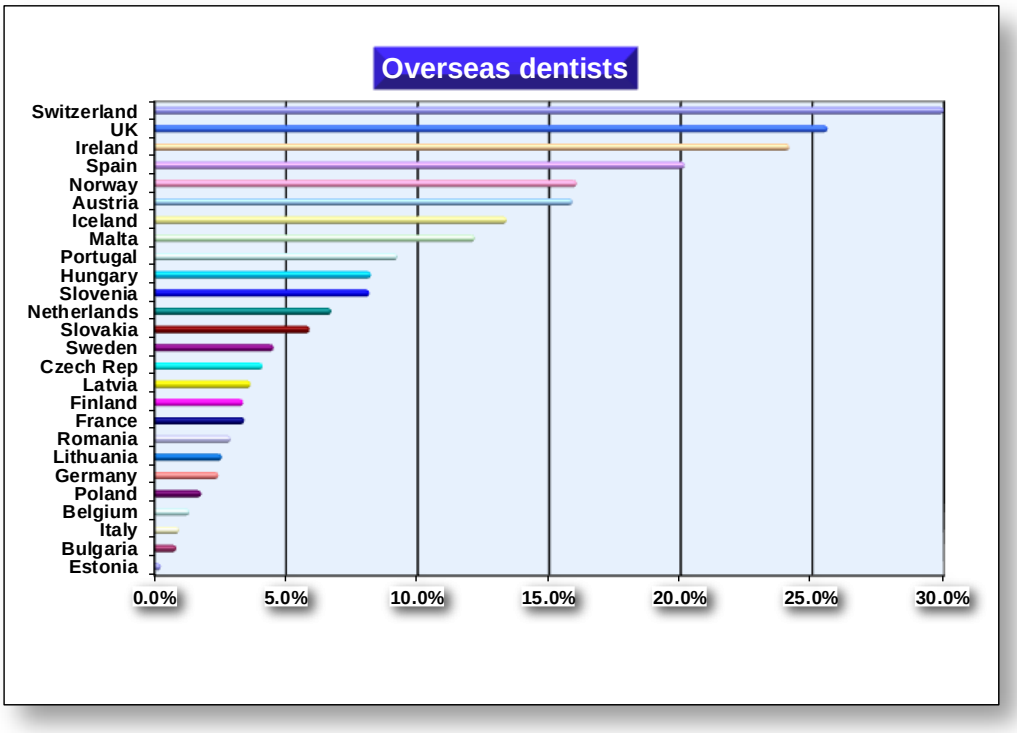
Overseas dentists

This expression refers to dentists who have received their basic dental qualification in any country other than the listed (host) country, even if they are nationals of that country. A dentist who is not a national of the country, but has qualified in that country is an "overseas dentist" for the purpose of this Manual.

The harmonisation of qualifications and the introduction of "Acquired Rights" have made travel between EU/EEA countries for the purposes of working as a dentist much easier.

We have examined countries' reports of the numbers of overseas dentists working within their borders:

Chart 12 – The proportion of "overseas dentists" in each country



No figures were submitted for Croatia, Denmark, and Greece. Three countries – Cyprus, Liechtenstein and Luxembourg do not have their own dental schools so, by definition, all dentists practising there qualified overseas (abroad), and are not shown. Since 2008, Austria, Malta, Slovenia and the UK had a significant increase in the number of overseas dentists practising – whereas Sweden and Portugal reported a reduced proportion.

Unemployment

Dentists are more likely to move to other countries than the one they graduated in, if they are unable to find work as a dentist. It is likely that in every country some short-term unemployment is possible, perhaps for days or weeks, immediately upon qualification or completion of vocational training, unless the new dentist is prepared to move away from the area of the dental school.

In 2003 ten countries reported longer-term unemployment for dentists, but this had fallen to only five by 2008 (Croatia, Finland, Germany, Greece and Italy). In 2013 the number had increased to 11 – as below.

Table 10 – Dentist unemployment in 2013

Austria	**Germany**	**Luxembourg**
Croatia	**Greece**	**Switzerland**
Bulgaria	**Hungary**	**United Kingdom**
Finland	**Italy**	

Specialists

Table 11 - Types of specialties, and numbers in each

(nb: endodontics and periodontics are often combined as one specialty, so the numbers shown for some countries may actually be combined)

	Year	Ortho	OS	OMFS	Endo	Paedo	Perio	Prostho	DPH	Others
Austria	2013	0		167						
Belgium	2011	399		290			139			
Bulgaria	2013	45	226	45	417	580	36	115	17	Yes
Croatia	2013	184	98		97	130	74	156		Yes
Cyprus	2013	46	12							
Czech Rep	2012	337		72						
Denmark	2013	290		98						
Estonia	2013	62		25						Yes
Finland	2013	156		104					90	Yes
France	2012	1,981								
Germany	2012	3,443	2,552				0		460	
Greece	2013	476		174						
Hungary	2013	379	139	157		254	65	924		
Iceland	2012	15	4		2	3	8	5	3	Yes
Ireland	2013	140	49	5						
Italy	2012	1,795		640						
Latvia	2012	24	0	39	10	23	0	19		
Liechtenstein	2013	2	1				1			
Lithuania	2013	93	92	23	44	56	57	270		
Malta	2013	7		1	9	2	3	3	3	Yes
Netherlands	2013	331		265	73	46	81			
Norway	2013	206	68	0	63	20	90	65		Yes
Poland	2012	1,115	805	227	1,561	486	420	1,453	71	
Portugal	2012	51	4	93						
Romania	2008	412	157	234						
Slovakia	2013	193	192	26		39	95	64		
Slovenia	2013	84	24	34	24	36	16	24		
Sweden	2010	265		145	47	83	101	134		Yes
Switzerland	2013	370	185				112	72		
UK	2013	1,343	754		250	246	333	431	117	Yes
		14,244	**5,362**	**2,864**						
Luxembourg and Spain do not recognise specialists										

- Orthodontics and Oral Surgery/Oral Maxillo-facial (OS and OMFS) are the two specialties which are recognised formally in some way by almost all of the EU/EEA countries described (the names, diplomas or other specialist qualifications recognised in each country are listed above).
- Many other specialties have national recognition in various ways (for example formal training, dental school departments) in different countries, but may not be formally recognised under the EU Dental Directive.
- In many countries Maxillo-facial Surgery is treated as a medical rather than a dental specialty (see above).

Austria, Spain and Luxembourg do not recognise the concept of specialisms in dentistry. In Austria, it is possible to train in any of the 3 universities in the "subspecialty" of oral surgery through a further 3 years education (officially, oral surgery still is a sub-speciality of medicine).

In most countries patients may access specialists directly, without the need to go via a primary care dentist. However, in Estonia, Ireland, Italy, Latvia, Portugal, Slovenia, Sweden and the UK a referral from a primary care dentist is necessary first.

Dental Auxiliaries

There is a wide variation across Europe in the regulations concerning an auxiliary's ability to work in the patient's mouth, and their level of independence from the instructions and supervision of a dentist. Considerable international variation exists in the level of training required, and the obligation to register with an association or other body. Additionally, in the Netherlands, Dental Hygienists are not legally dental auxiliaries, as they form an independent profession.

Table 12 (overleaf) illustrates the considerable variation in the level of recognition of dental auxiliaries. Generally, in those countries where the dominant form of practice is dentists working alone in independent or liberal practice there is less reliance on other dental professionals.

Dental Hygienists

There are Dental Hygienists in most countries (23), although they do not need to register in 6 countries (Cyprus, the Czech Republic, Italy, Lithuania, the Netherlands and Poland). Slovenia has had hygienists since 2005, although there are no plans for registration of them.

Qualification nearly always leads to a diploma or degree, with which the hygienist has to register with a competent authority in most countries. Hygienist training in most countries with such training is for 2 or 3 years, but in Hungary one year only is necessary. Conversely, in the Netherlands, Lithuania and the UK training may be for up to 4 years.

There are varying rules within the different countries relating to the degree of supervision of hygienists, and the duties they may perform. Many countries allow their hygienists to diagnose and treatment plan. Please refer to the individual country sections to check the varying rules.

Dental Technicians

Dental Technicians, who provide laboratory technical services, are recognised in all countries. Formal training is offered in all but two countries (Luxembourg and Cyprus) and takes place in special schools. The training is for a variable number years (2 to 5). In 22 countries they must be registered to provide services.

Dental technicians normally provide services only to dentists, although in most countries they are permitted to repair dental appliances directly for patients, provided they do not need to take impressions or otherwise work in the mouth.

Clinical Dental Technicians

Only 5 countries (Denmark, Finland, the Netherlands, the UK and Switzerland in some cantons)[25] allow Clinical Dental Technicians or Denturists who may provide oral health services – specifically full (complete) or partial dentures - directly to the public. This means that they are trained to work inside the mouths of patients. The United Kingdom introduced this class of auxiliary only in 2007.

Training generally takes place in special schools, sometimes – but not always - associated with the dental schools. The training is for one or two years, often following prior training as a dental chairside assistant or dental technician.

Dental Assistants

In all countries, dentists have staff variously called *dental surgery assistants*, *dental nurses*, or *dental chairside assistants*, or *dental receptionists* who may assist with chairside duties. However, the development is not as great in some countries (Belgium, Greece and Portugal) where most dentists work without the help of another person at the chairside, and Cyprus, France, Lithuania and Poland less than half of dentists work with such help.

In about half of the countries there is a dental assistant or nursing qualification available, and in half of these there is a registerable qualification, which the assistant may have to have to work with the dentist.

Dental Therapists

In a few European countries there is formal recognition of another type of clinically operating auxiliary – Dental Therapists, who provide limited clinical conservation and exodontia services (Sweden, Switzerland and the United Kingdom) and Orthodontic Auxiliaries (Sweden and the UK). Again, like hygienists, there are different rules about the duties they may perform and the degree of supervision they may need.

In Latvia, therapists were trained in the 1960s, but few remain in practice and further training has not taken place for many years.

Other Auxiliaries

Many countries permit dental nurses to provide oral health education to patients, or have a formal class of auxiliary (without registration) to provide this service.

[25] Romania has reportrd having hygienists and denturists but has not provided any further information

Table 12 - Types of auxiliary recognised in each country

Country	Dental Hygienist	Dental Technician	Clinical Dental Technician	Chairside Assistant DCA	Dental Therapist	Comments
Austria		R		FT		Some DCAs specialise in oral health prevention
Belgium		R		NFT		
Bulgaria		R		NFT		
Croatia		FT		NFT		
Cyprus	N	R**		NFT		
Czech Republic	N	N		FT/N		
Denmark	R	N	R	FT/N		Hygienists may work without supervision.
Estonia	N	R		R		
Finland	R	R	R	R		
France		N		FT/N		
Germany	R	R		R		
Greece		R		R		
Hungary	N	R		R		
Iceland	R	R		R		Formal training must take place overseas
Ireland	R	N	R	FT/N	R	Orthodontic Therapists train in the UK. There are also Oral Health Educators
Italy	N	R		FT/N		
Latvia	R	R		R	R	Training of Therapists ceased in 1976
Liechtenstein	R	R		R		Formal training takes place in Switzerland
Lithuania	R	R		R		There are also Assistant's helpers, who do not need to be registerd
Luxembourg		N		NFT		
Malta	R	R		FT/N		
Netherlands	N	N	R	FT/N*		Hygienists and CDTs are independent professions (and are not auxiliaries)
Norway	R	R		R		
Poland	N	N		NFT		
Portugal	R	R		FT/N		
Romania		R		R		There are Hygienists and CDTs, but there is no further information about them
Slovakia	R	R		R		There are Nurses and Assistants
Slovenia	N	R		NFT		
Spain	R	N		NFT		Technician registration is mandatory in some regions
Sweden	R	R		FT/N		There are also orthodontic operating auxiliaries
Switzerland	R	R	R	FT/N	R	There are Registered Dental Therapists and Denturists in some cantons
United Kingdom	R	R	R	R	R	There are Registered Dental, Orthodontic Therapists, Expanded Duties Dental
						Nurses. There are also Oral Health Educators (who do not need to be registered).

Formal training is always necessary for Hygienists, Clinical Dental Technicians and Therapists – and always available for Dental Technicians. It may be available for Chairside Assistants/Dental Nurses (as shown)

R = Registration with a competent authority necessary (always following formal training and qualification)
N = No registration necessary to work
NFT = No formal training or registration necessary
FT = Formal training available

Blank cell indicates that this class of dental auxiliary is not recognised

Table 13 - Regulators of dental auxiliaries

	REGULATION OF DENTAL AUXILIARIES IN 2013
	Name of regulator
Austria	Local trade federations
Belgium	Registration with the Ministry of Health
Bulgaria	Laboratories must register with the Ministry of Health
Croatia	Techs must pass state exam of Ministry of Health to work
Cyprus	Technicians must register with the Dental Technicians' Council
Czech Rep	No registration
Denmark	Hygienists and denturists only: CDTs must register with the Health and Medicines Authority
Estonia	Registration is with the Healthcare Board
Finland	Registration is with the National Supervisory Authority for Welfare and Health
France	No registration
Germany	Kassenzahnärztliche Vereinigungen (KZV) - dental hygienists and assistants
Greece	Technicians' registration is with the Ministry of Health and Welfare
Hungary	Hygienists and DCAs register with the Ministry of Health, Master technicians by the regional Chambers of Industry*
Iceland	Registration is with the Directorate of Health
Ireland	Hygienists, CDTs and Orthodontic Therapists: Irish Dental Council
Italy	Technicians have to be registered with the *Camera di Commercio* of each Province
Latvia	Registration is with the Centre of Dentistry
Liechtenstein	Hygienists and technicians register with the public *Berufsbildungsamt*
Lithuania	The Licensing Committee at the Lithuanian Dental Chamber
Luxembourg	Only a diploma allows a qualified technician to own a dental laboratory.
Malta	Hygienists and technicians: Board for Professions Supplementary to Medicine
Netherlands	Denturists must register with their Federation
Norway	All auxiliaries (including Assistants) - the Registration Authority for Health Personnel (SAK)
Poland	Register planned but none in 2013
Portugal	Hygienists and technicians must register with the Ministry of Health
Romania	Dental Technicians must register with the Romanian Order of Dental Technicians
Slovakia	The Association of Dental Hygienists and the Chamber of Dental Technicians, register these, respectively.
	DNs are registered with the Chamber of Midwives and Nurses and Assistants with the Chamber of Other Health Professionals
Slovenia	Only technicians must register (with the Economy Chamber)
Spain	Hygienists must hold a Certificate of Proficiency granted by the Ministry of Education and Culture
Sweden	National Board of Health and Welfare (Hygienists and Technicians)
Switzerland	Hygienists: professional education department of the Swiss Red Cross**
UK	General Dental Council
	** Entrepreneurial technicians running a private firm by the Court of Registration
	** Registration of technicians (and CDTs) varies across cantons. Therapists are SSO-trained and are also registered with the association

Continuing education for dental auxiliaries

Dental auxiliaries are required to undertake continuing education in Lithuania, Slovakia and the United Kingdom.

Numbers in the dental workforce

Table 14 – The total workforce

Number of dentists	**442,027**
Number of auxiliaries	**681,850**
Workforce total	**1,123,877**

From the figures in Table 14, it can be seen that the recorded total dental workforce is over 1.12 million workers (0.97m in 2008). Adding in the workers not recorded here, such as cleaners, managers and those work in the dental trade, it is more than likely that over 1.5 million people directly derive their employment from dentistry in the EU/EEA.

Numbers of dental auxiliaries

Table 15 – The numbers of dental auxiliaries

	Hygien-ists	Techs	CDTs	Assist-ants	Thera-pists	Others	F/T equiv at 0.43	Equiv Wrkfrce	Equiv PopRatio	Dents per tech
Austria	0	620	0	10,200	0	0	0	4,421	1,920	7
Belgium	0	2,250	0	1,500	0	0	0	7,777	1,434	3
Bulgaria	0	1,235	0	No data	0	0	0	8,350	872	7
Croatia	0	1,691	0	631	0	0	0	3,875	1,155	2
Cyprus	458	130	0	34	0	0	197	827	1,047	6
Czech Rep	800	4,500	0	8,000	0	0	344	8,165	1,288	2
Denmark	800	1,100	565	4,400	0	0	587	5,748	975	5
Estonia	32	137	0	1,540	0	0	14	1,264	1,048	9
Finland	1,490	450	400	4,800	0	0	813	5,313	1,023	10
France	0	16,500	0	15,350	0	4,786	0	41,505	1,582	3
Germany	550	58,000	0	182,000	0	0	237	69,473	1,159	1
Greece	0	4,500	0	2,000	0	0	0	9,000	1,197	2
Hungary	1,000	3,000	0	4,668	0	0	430	5,403	1,833	2
Iceland	14	101	9	320	0	0	10	279	1,158	3
Ireland	458	350	24	1,262	5	0	209	2,409	1,905	6
Italy	6,000	13,023	0	95,000	0	0	2,580	48,476	1,231	4
Latvia	219	551	0	1,360	87	0	132	1,606	1,357	3
Liechtenstein	8	27	0	105	0	0	3	51	719	2
Lithuania	572	1,114	0	1,904	0	0	246	3,856	768	3
Luxembourg	0	82	0	390	0	0	0	452	1,188	6
Malta	21	53	0	100	0	0	9	179	2,354	3
Netherlands	3,200	5,000	370	19,000	0	0	1,535	10,308	1,629	2
Norway	902	703	0	3,671	0	0	388	4,964	1,020	7
Poland	2,500	7,000	0	9,725	0	0	1,075	22,875	1,685	3
Portugal	520	546	0	No data	0	0	224	9,321	1,125	17
Romania	100	4,500	8	2,000	0	0	46	14,446	1,388	3
Slovakia	187	1,392	0	3,610	0	0	80	3,378	1,602	2
Slovenia	15	251	0	870	0	0	6	1,364	1,510	5
Spain	13,200	11,135	0	37,000	0	0	5,676	34,676	1,357	3
Sweden	3,749	1,500	0	12,000	0	360	1,612	9,140	1,048	5
Switzerland	1,600	1,800	50	6,500	280	0	830	5,630	1,431	3
UK	6,291	6,283	233	48,465	2,194	322	3,749	38,283	1,669	5
EU/EEA Totals	**44,686**	**149,524**	**1,659**	**478,405**	**2,566**	**5,468**		**382,814**	**1,358**	

"Equiv" means Equivalent [Workforce]

Part 8: Dental Practice in the EU

Although countries in Europe exhibit many wide variations in how general health care is provided (for example, in terms hospital ownership, manpower structure, and the balance between primary and secondary care), the provision of dental care, in most countries, is dominated by non-salaried practitioners, working from privately owned premises ("private" or "liberal" or "general" practitioners). Over most of the EU/EEA these represent nearly 90% of practising dentists, with several countries (Belgium, Iceland, Luxembourg, Malta and Portugal) reporting virtually 100% of clinical dentistry being provided this way.

Table 16 - Percentage of dentists who are practising in general practice

Active dentists in full or part-time GP			
Finland	44%	Czech Rep	94%
Sweden	46%	Liechtenstein	94%
Slovenia	59%	Portugal	94%
Lithuania	61%	Cyprus	95%
Denmark	66%	Latvia	95%
Ireland	68%	Slovakia	95%
Norway	69%	Germany	96%
Croatia	76%	Bulgaria	96%
Hungary	76%	Estonia	96%
Greece	82%	Belgium	97%
Austria	87%	Romania	88%
France	90%	Malta	98%
Switzerland	90%	Luxembourg	99%
Italy	91%	Spain	99%
UK	92%	Iceland	100%
Poland	96%	Netherlands	100%
Total for the EU/EEA			89%

Only in countries where there is a large, publicly-funded dental service is the numerical dominance of the general practitioner less pronounced. Even so, since the public dental services are usually dedicated to providing care to special groups such as children, private practitioners are without a doubt the main, and often the only, provider of care to the adult population.

Liberal (General) Practice

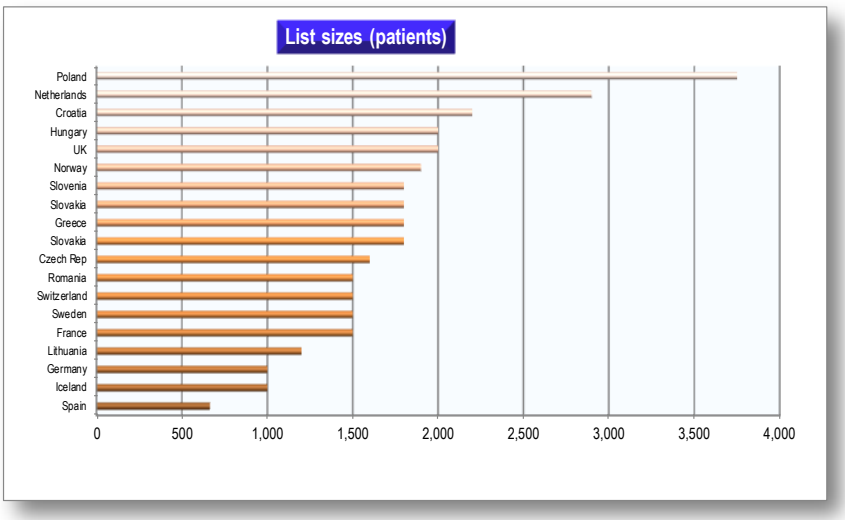
The methods of establishing a liberal or general practice are similar across Europe, with younger dentists employed as associates or assistants before they can afford to buy their own practice. However, in countries where solo private practice dominates (for example, France, Belgium and Norway) starting positions as associates or junior partners are very difficult to obtain. Government incentive schemes, usually to persuade dentists to set up in sparsely populated areas are also very rare. The importance of dentists as a liberal profession was underlined by the adoption of the EU Charter for Liberal Professions, proposed by the Council of European Dentists and jointly developed and adopted with the representative organisations of European doctors, community pharmacists, engineers and veterinarians. Please see Annex 12 for more information.

Most dentists, as with any other business, have to take out commercial loans in order to purchase a practice. By buying an existing practice they usually buy a list of patients as well.

Many countries have some regulations which govern the location of premises where dentists may practise but usually there are only general planning requirements.

Generally, across Europe, dentistry in general practice is carried out as small businesses, with only one, two or a few dentists practising together (in Greece, it is only since 2001 that dentists can share a clinic or dental chair). However, in most countries corporate practice is permitted (see Part 9 – Professional Matters) and so there are large, multi-dentist group practices – for example in the United Kingdom one company owns over 500 practices, employing several thousand dentists.

Dental associations suggest that premises for practices tend to be in converted houses or apartments, or converted public clinics (several of the new members of the EU report this). Shopping malls do not seem to be popular in Europe, for dental practices.



Dental Practice list sizes

In many countries dental practices maintain a "list" of regularly attending patients. Sometimes this list is recorded by the National Health Service or social insurance scheme.

However, only a few dental associations are able to estimate the average size of their dentists' lists, as there are too many variables to affect the average:

Chart 13 – Dental practices "list" sizes

Public Dental Services

For the purposes of the description of the delivery of healthcare outside liberal (general) or private practice, we describe this as Public Dental Services. However, this is not strictly accurate as the boundaries between self-employed/salaried dentists, and privately owned/publicly owned facilities have become blurred in recent years.

So, there are salaried dentists in private practice - usually as assistants or associates to the practice owner, although these may be paid by the state, by way of such as vocational training. In the same way, whilst most liberal dentists own or rent their premises from the private sector, in some countries (for example, Estonia) they may be renting the facility from the local health authority or municipality – which may even be supplying the auxiliary staff, equipment and materials.

Overall, about 11% of dentists in the EU/EEA work in public dental service clinics. This figure has hardly changed since the last edition of the Manual.

In some countries, the term "Public Dental Services" also applied to liberal practitioners working within the NHS system of that country. For the purposes of the description in this section of the Manual, this term is being applied to those who work in (usually) salaried practice, in state or social insurance funded facilities (clinics and non-private hospitals), within any state system or social insurance fund.

Table 17 –Dentists working in public dental services

PUBLIC CLINIC DENTISTS								
		Population	Active dentists	Public clinics	Univer-sities*	Hospitals	Armed Forces	Others
Austria	2013	8,489,482	4,421	601	206	110	0	
Belgium	2011	11,153,405	7,777	0	200	0	10	
Bulgaria	2013	7,282,041	8,350	0	258	35	46	
Croatia	2007	4,475,611	3,875	446	137	No data	No data	33
Cyprus	2013	865,878	827	39		0	2	0
Czech Rep	2012	10,516,125	7,821	0	295	30	31	
Denmark	2013	5,605,836	5,161	1,215	112	58	15	
Estonia	2013	1,324,814	1,250		18	35	5	0
Finland	2013	5,434,357	4,500	2,165	86	113	72	
France	2012	65,657,000	41,505	2,828	393	219	48	
Germany	2012	80,523,746	69,236	450	2,000	200	450	
Greece	2013	10,772,967	9,000	452	237	452	71	836
Hungary	2013	9,906,000	4,973	20	240	35	40	
Iceland	2012	322,930	269	3	23	5		
Ireland	2013	4,591,087	2,200	333	50	10	5	
Italy	2012	59,685,227	45,896	3,157	400	300	100	
Latvia	2012	2,178,443	1,474	10	31	31	0	
Liechtenstein	2013	37,009	48	0	0	0	0	
Lithuania	2013	2,962,000	3,610	538	80		13	
Luxembourg	2008	537,000	452					
Malta	2013	421,364	170	35	24	31	0	
Netherlands	2013	16,789,800	8,773	250	110	214	30	
Norway	2013	5,063,709	4,576	1,109	234	35	23	
Poland	2012	38,533,299	21,800	500	400	250	300	
Portugal	2012	10,487,289	9,097	43	446	90	16	
Romania	2013	20,057,458	14,400	1,200	950	234	80	
Slovakia	2013	5,410,728	3,298	80	120	29	22	
Slovenia	2013	2,060,253	1,358	523	27	31	0	
Spain	2012	47,059,533	29,000	1,300	864	350	340	
Sweden	2010	9,580,424	7,528	4,065	431	N/R	N/R	
Switzerland	2013	8,058,100	4,800	200	300	50	0	
UK	2013	63,887,988	34,534	1,800	566	2,084	244	250
			361,979	**23,362**	**9,238**	**5,031**	**1,963**	**1,119**
				6.5%	2.6%	1.4%	0.5%	0.3%
Proportion of total workforce:			**11.2%**					

*** For the purpose of this table, this includes private universities**

Bulgaria, Lithuania, Romania and Switzerland: "active" means registered dentists

Public Clinics

Most countries have some form of state service operating from publicly funded clinics. The "culture" of dentistry provided from publicly funded clinics is especially strong in the Nordic and Baltic countries, where, with the exception of Estonia a large proportion of active dentists work in them.

There are no public clinics in 7 countries; and, in many countries dentists only work part-time in such clinics – either because they are females who stay home to look after their young families, or because low salaries mean that they also work part-time in private practice.

The common services provided by most of the countries with these clinics will include emergency care, domiciliary care, dental public health support, preventive services and postgraduate training. These services are available to all citizens and often without charges. However, in just over half the countries, general dental care may also be available to certain classes of patients – such as the under-18s, the elderly, medically compromised patients and low income adults. These services also are often provided without charges.

Table 18 - Countries without public clinics

Belgium	Iceland
Bulgaria	Liechtenstein
Czech Republic	Luxembourg
Estonia	

Hospital Dental Services

As said above, the strict definition of what is a hospital is not uniform across Europe. But, for the purposes of this section we are looking at premises which have facilities for patients undertaking general medical care to receive services for acute or chronic care, either as in-patients for one or more nights, and as out-patients. Dental schools without these facilities are not part of this review.

All countries have hospitals which provide services for trauma, oral maxillo-facial surgery and pathological services. Most also undertake postgraduate training for potential surgeons. There are state-funded facilities in every country, and some also have private hospitals which provide some care. The practitioners involved in providing the care are usually salaried in public hospitals – but in most countries they are also able to work additional hours in private practice.

Whether these services are provided as part of oral healthcare or medical healthcare depends upon individual countries. Apart from Iceland and Luxembourg salaried personnel are available for this provision, and there is often no charge for it.

In most countries there is provision for emergency dental treatment for in-patients, but this is often provided by local general practitioners. However, in six countries general dental care is provided for patients who are not in hospital – often as part of specialist services. These countries are Cyprus, Ireland and Malta (with historical links with the UK), Spain, Sweden and the UK. Indeed, in the UK this service is very developed, with nearly 10% of practising dentists involved in providing this care, or in postgraduate training.

Dentistry in the Universities

Some dental care is provided in dental schools, by academic dentists and (in most countries) by dental students. However, it is thought that the amount of oral healthcare delivered this way is very limited.

Dentistry in the Armed Forces

Many countries of the EU/EEA have national service in the armed forces. These countries and many of those with volunteer armed forces, have formal arrangements to provide oral healthcare for their personnel, either from Armed Forces Dental Units, or from local arrangements with public clinics.

However, in Germany, Poland and the UK, the Armed Forces Units are well developed and large numbers of dentists serve this way.

Illegal Practise of Dentistry

There were no reports of the illegal practise of general dentistry across the EU/EEA. However, there are reports of the provision of dentures and tooth whitening procedures by persons not legally able to provide these.

Several countries - Belgium, France, Greece, Hungary, Ireland, Italy and the UK - report illegal denturism, although with the introduction of (legal) clinical dental technicians in the UK in 2008 this illegal practise is expected to reduce. ANDI (Italy) report a considerable amount of illegal practise in Italy by dental technicians, some of which is thought (by ANDI) to be condoned by medical practitioners, who cover for the technicians concerned. And VVT (Belgium) report that there is a move to introduce legal denturism into Belgium.

Clinical Dental Technicians/Denturists may practise legally in Denmark, Finland, the Netherlands, parts of Switzerland and the UK – so the potential for illegal practise is reduced.

However, a continued problem in many EU/EEA countries is the illegal provision of tooth whitening products in the mouth by unqualified persons, even after the introduction of the 2011 Directive. In the UK, despite successful prosecutions in the courts by the General Dental Council, non-qualified persons continue to offer whitening services using >0.01% hydrogen peroxide.

Part 9: Professional Matters

Professional representation

Table 19 - Membership of national dental associations

Membership of dental associations and chambers

Mandatory membership in red

		Numbers		Year	Source
Austria	Österreichische Zahnärztekammer	4,820	100%	2013	Chamber
Belgium	Chambres Syndicales Dentaires	1,016		2012	FDI
Belgium	Société de Médecine Dentaire	1,096		2012	FDI
Belgium	Verbond der Vlaamse Tandartsen	3,500		2012	VVT
Belgium	Vlaamse Beroepsvereniging voor	600		2012	VVT
Bulgaria	Bulgarian Dental Association	8,350	100%	2013	BgDA
Bulgaria	Association Médicale	>150		2013	BgDA
Croatia	Dental Chamber	6,859	100%	2012	Chamber
Croatia	Dental Society	1,748	100%	2012	FDI
Cyprus	Cyprus Dental Association	773	100%	2012	FDI
Czech Rep	Czech Dental Chamber	9,354	100%	2012	Chamber
Denmark	Association of PH Dentists	1,293		2013	DCPA*
Denmark	Danish Dental Association	6,507	81%	2013	DCPA*
Estonia	Estonian Dental Association	799	50%	2012	FDI
Finland	Finnish Dental Association	4,240	98%	2013	FDI
France	ADF	30,053	65%	2012	FDI
Germany	Bundeszahnärztekammer	69,236	100%	2012	BZÄK
Greece	Hellenic Dental Association	9,000	100%	2013	HDA
Hungary	Hungarian Dental Association	718	88%	2012	FDI
Iceland	Icelandic Dental Association	270	90%	2012	FDI
Ireland	Irish Dental Association	1,700	82%	2013	IDA
Italy	ANDI	23,396		2012	ANDI
Italy	AIO	7,053		2012	FDI
Latvia	Latvian Dental Association	1,474	100%	2012	LDA
Liechtenstein	Liechtenstein Dental Association	28		2013	LDA
Lithuania	Lithuanian Dental Chamber	3,660	100%	2013	Chamber
Luxembourg	Association des Médecins	410	90%	2013	AMMD
Malta	Dental Association of Malta	130	76%	2013	DAM
Netherlands	Nederlandsche Maatschappij	6,653	76%	2013	NMT
Norway	Norwegian Dental Association	4,539	90%	2012	FDI
Poland	Polish Dental Association (Society)	5,400		2013	Chamber
Poland	Chamber of Physicians & Dentists	21,800	100%	2013	Chamber
Portugal	Ordem dos Médicos Dentistas	8,568	100%	2012	OMD
Romania	Romanian Dental Association	700	25%	2012	FDI
Romania	Romanian Soc of Stomatology	200		2012	FDI
Slovakia	Slovak Chamber of Dentists	2,906	87%	2013	Chamber
Slovenia	Medical Chamber of Slovenia	1,789	100%	2013	MCS
Spain	Consejo General de Colegios	31,260	100%	2013	Colegios
Sweden	Swedish Dental Association	5,138	95%	2013	SDA
Switzerland	Société Suisse des médecines-	4,130	90%	2013	SSO
UK	British Dental Association	19,736	50%	2012	FDI
	Total	**310,902**			

* The Danish Confederation of Professional Associations

Although all countries have a main national dental association, some have two or more (for example, Belgium) and many are primarily *federations* of the regional associations (for example Germany, Greece and Spain).

The primary role of all national dental associations is to defend the interests of individual members and the dental profession as a whole. However, although the national dental association usually plays an important role in determining the level of "standard fees", in several countries the association is also the official trade union for dentists.

In about one third of the countries, membership of the dental association or, as is often known, the Chamber, is mandatory – often because the association or chamber acts as the registration authority as well. In some countries, as well as providing continuing education for dentists (and dental auxiliaries), the association or chamber is responsible for ensuring the participation in it.

In those countries where membership is voluntary uptake is very mixed. So, whereas in Latvia 100% of dentists are members of the association, in many countries (Estonia, Italy, Malta and the UK) only about half of dentists are members of the national association.

European dental organisations

The Council of European Dentists (CED)

The Council of European Dentists, which commissioned this Manual, was established in 1961 at the request of the Department of Social Affairs of the European Commission. It is a European not-for-profit association which represents over 340,000 dentists across Europe. It was formerly called the EU Dental Liaison Committee (EUDLC), but its name was changed in May 2006. It is a council of dental associations, with all the member countries of the EU, except for Romania, being members in 2014. Attending as observers are representatives of Iceland, Norway and Switzerland. The associations appoint up to two members each as delegates to the CED's plenary meetings – which are held twice a year, once in a host EU country, and once in Brussels.

Between plenary meetings an elected board and working groups attend to matters, and the CED has a permanent office and secretariat in Brussels.

The Board (of Directors) is composed of 8 members who serve for 3 years, being elected by the (plenary) General Meeting. The Board formulates proposals for the CED policy, for approval by the General Meeting. It secures and monitors the proper and efficient administration of the CED.

The Board generally meets four times a year.

Much of the business of the Council is conducted by Working Groups and Task Forces. In 2014 there were 8 WGs, looking after subjects such as Education, Patient Safety and Oral Health (etc).

The CED task forces are active for limited periods of time, and for specific and urgent issues, such as Antibiotic Use, and the Internal Market. They are established by, and accountable to the CED Board of Directors.

The Council's objective is to develop and execute policy and strategy in order to:

- Promote the interests of the dental profession in the EU;
- Promote high standards of oral health;
- Promote high standards of dentistry and dental care;
- Contribute to safeguarding the protection of public health;
- Monitor, analyse and follow up on all the political and legal developments and documents of the EU that involve dentists, dental care and oral health;
- Actively lobby the European Institutions and Parliament, in order to serve the legal and political interests of dentists, including consumer protection issues

To achieve these objectives, the CED:

- Monitors EU political and legislative developments which have an impact on the dental profession
- Issues policy statements and drafts amendments to proposed EU legislation, so as to ensure that the views of European dentists are reflected in all EU decisions affecting them
- Provides expertise for the EU institutions in the areas of health and consumer protection, training, safety at the work place and internal market legislation
- Provides a platform for the exchange of information between national dental associations, and supports them in understanding the effects and implementation of EU legislation, in particular members from the new Member States and EU accession countries
- Cooperates with all major European associations of health professionals and other liberal professions on policy issues of common interest

The Council and member associations have worked closely with the European Institutions in a number of matters and are officially consulted by the European Commission on health matters.

http://www.eudental.eu/

The Association for Dental Education in Europe (ADEE)

The Association for Dental Education in Europe was founded in 1975 as an independent European organisation representing academic dentistry and the community of dental educators. Since then, ADEE has played an important role by enhancing the quality of education, advancing the professional development of dental educators and supporting research in education and training of oral health personnel.

The ADEE brings together a broad-based membership across Europe comprised of dental schools, specialist societies and national associations concerned with dental education.

The ADEE is committed to the advancement of the highest level of health care for all people of Europe through its mission statements:

- To promote the advancement and foster convergence towards high standards of dental education.
- To promote and help to co-ordinate peer review and quality assurance in dental education and training.
- To promote the development of assessment and examination methods
- To promote exchange of staff, students and programmes.
- To disseminate knowledge and understanding on education
- To provide a European link with other bodies concerned with education, particularly dental education.

http://www.adee.org/about/index.html

Professional Ethics

Dental practitioners in every European country have to respect ethical principles. Whether formally expressed as laws, oaths or as written guidelines these principles relate to their relationship with patients, other dentists and the wider public.

The commonest method of providing dentists with ethical guidance is through a simple written code. This is usually administered by the national dental association or in some countries by the separate regulating body (for example, as in France, Ireland and the UK). The application of these codes is usually by committees at a local level. The CED's Code of Ethics can be found in Annex 9.

Dentists' professional and other behaviour is usually also governed by specific laws (such as the Dental Acts in Norway and Iceland), more general medical laws (for example, in many of the new member countries of the EU, and in Austria, where dentists must also take the 'Hippocratic Oath') as well as laws on professional and business conduct.

Standards and Monitoring

Although the threat of patient complaints is probably still the strongest 'control' on the standard of care, increasingly oral health systems have other mechanisms for monitoring dental practice. These include external 'prior approval' of expensive or complex treatments, incentives or rules for participation in continuing education, as well as more basic controls on the level of billing and patterns of treatment of individual practitioners.

Some of the widest variations in dental practice across Europe relate to the monitoring of standards. In most countries monitoring is not of the quality of care, but is simply an administrative control, to ensure that the patient has been charged the correct amount for the type and amount of treatment received.

Only in a few countries are there "examining dentists", who re-examine the patients of selected dentists, to see that the dentist has fairly claimed payment for work done. However, in these countries it is not usual for examining dentists to visit at random, and most re-examinations are the result of patient complaints. In some countries the threat of patient complaints offers the only real form of pressure on dentists maintaining the standard of care.

Advertising

There is tremendous variation across the EU/EEA as to what constitutes "advertising", in its truest sense, when applied to publication of information about dentists and their dental practices. So, in many countries even an entry in the "Yellow Pages" classified telephone directories could be counted as advertising. In the following countries the rules are very tight and practitioners are barred from any form of public announcements:

Table 20 – Advertising not permitted

Belgium	Iceland	Portugal
France	Luxembourg	Romania
Greece	Malta	Slovakia

Advertising on the first opening of a dental practice only is permitted in Croatia, Cyprus and Slovenia. Only limited advertising is permitted in Hungary.

Websites

In contrast to the rules relating to advertising virtually all countries permit the use of dental practice websites – with only Luxembourg and Malta dissenting from this. The Guidance to the Directive on Electronic Commerce, developed by the CED, can be found in Annex 10.

Data Protection

All the countries of the EU, Norway and Switzerland have adopted the EU Data Protection Directive into their national legislation. National law in Iceland covers this area of dental practice.

Indemnity Insurance

In all EU/EEA countries, professional Indemnity Insurance, to ensure that proper compensation is available for patients who are harmed in some way. This thereby protects dentists against having to pay damages and legal costs should a claim arise against them. However, in some countries this indemnity insurance is not mandatory (see below):

Table 21 – Indemnity Insurance mandatory

Mandatory Indemnity					
	Mandatory	Overseas		Mandatory	Overseas
Austria	Yes	No	Latvia	Yes	No
Belgium	Yes		Lithuania	Yes	No
Bulgaria	Yes	No	Luxembourg	Yes	No
Croatia	No		Malta	Yes	
Cyprus	No		Netherlands	No	Yes
Czech Rep	Yes	Yes*	Norway	Yes	
Denmark	Yes**		Poland	Yes	
Estonia	No		Portugal	No	
Finland	Yes	No	Romania	Yes	
France	Yes	Yes	Slovakia	Yes	No
Germany	Yes	No	Slovenia	Yes	Yes*
Greece	No	Yes*	Spain	Yes	Yes
Hungary	Yes	No	Sweden	Yes	No
Iceland	Yes	No	Switzerland	No	No
Ireland	Yes	Yes	UK	Yes	Yes
Italy	Yes				
* at additional cost			** included in membership of DDA		

Eight countries reported that the mandatory or non-mandatory indemnity insurance may extend to the dentist working in another country – although this would usually be an adjacent country for working near the border or alternatively to any country, but for a limited period (usually measured in months).

Corporate Practice

Most countries permit dentists to set up their practices as limited liability companies (corporate bodies). Only in Germany, Ireland, and Malta is this barred completely. There is no information for Luxembourg.

In the countries in the following table non-dentists may wholly or partly own the company, but in all cases only dentists can be responsible for clinical matters and usually one or more dentist must be on the board of the company and at least one dentist must be employed:

Table 22 – Corporate practice permitted

Belgium	Greece	Portugal
Bulgaria**	Hungary	Romania
Croatia	Iceland**	Slovakia
Cyprus	Italy	Slovenia
Czech Republic	Latvia	Spain
Denmark	Lithuania	Sweden
Estonia	Netherlands	Switzerland**
Finland	Norway	United Kingdom
France**	Poland	

** in these countries membership of the board of the company is limited to dentists only.

In Austria, dentists are allowed to form a so called "Gruppenpraxis", which is a form of company, but these companies are only allowed to work outside of the social security system. A non-dentist cannot be a part-owner and/or on the board of such a company

Tooth whitening

The current information about Tooth Whitening can be found in Annex 8.

By 30th October 2012 all countries had complied with the demand to enact regulations putting the Directive into effect.

Most countries have reported that in 2013 there were still many non-dental professionals illegally continuing to undertake tooth whitening using products with greater than 0.1% hydrogen peroxide.

Health and Safety at Work

All EU/EEA countries have rules about protection of dental workers and patients, including items such as the prevention of cross infection. So, the use of one-use only disposables - such as (for example) needles and gloves is widespread, with increasing numbers of items joining the list of "one-use only".

Inoculations against diseases, especially Hepatitis B for dental workers, are universal and recommended. However, in many countries inoculation against Hepatitis B is mandatory. There has been little change to this list since 2008.

Table 23 – Inoculation against Hepatitis B mandatory

Belgium	Hungary	Romania
Croatia	Latvia	Slovenia
Czech Republic	Malta	United Kingdom
France	Netherlands	

Ionising Radiation

All countries have regulations relating to use of radiographic equipment, which usually include mandatory regular inspection of machinery and often recording of this in a central database.

All dentists learn about ionising radiation as part of their undergraduate studies. However, in most countries the taking of radiographs is not necessarily limited to dentists in dental practices – other dental workers may undertake these if they have had the necessary education and training.

In just over half the countries the regulations relating to ionising radiation make continuing education about this subject mandatory on a regular basis – usually a specified number of hours in every 5 (or so) years:

Table 24 – Mandatory continuing education relating to ionising radiation

Austria	Finland	Luxembourg
Belgium	France	Norway
Bulgaria	Germany	Poland
Croatia	Hungary	Slovakia
Czech Republic	Italy	Slovenia
Estonia	Latvia	United Kingdom
Finland	Lithuania	

Hazardous Waste

Again, all countries have regulations relating to the storage, collection and disposal of waste, including clinical waste. Of particular relevance to dental practices is the collection of waste amalgam. Every country now recommends the fitting of "amalgam separators" – which collect waste amalgam before this reaches the main drainage system.

However, most countries insist upon these being fitted as a mandatory requirement. Sometimes this is necessary just in newly installed units, but often it is a mandatory requirement in every surgery, whether new or not. Only Denmark has been added to this list since 2008.

Table 25 – Amalgam separators mandatory

Austria	France	Netherlands
Belgium	Germany	Norway
Croatia	Greece	Slovakia
Cyprus	Hungary**	Slovenia
Czech Republic	Iceland	Spain**
Denmark	Latvia	Sweden
Finland	Luxembourg	Switzerland
	Malta	United Kingdom

** for new units only

Part 10: Financial Matters

Retirement

All countries of the EU/EEA have a state retirement age, which is the age at which dentists working in the public dental services, or liberal (general) dentists with contracts with a state system/sick fund have to retire. However, there is no universal rule about this, and it will vary from country to country. All countries permit continued private practice beyond the normal retirement age – with a further upper age limit in a few countries.

Retirement ages			
Austria	65/60	**Latvia**	62
Belgium	65	**Lithuania**	63
Bulgaria	63/60	**Luxembourg**	65
Croatia	65	**Malta**	65
Cyprus	65	**Netherlands**	65
Czech Rep	63	**Norway**	67
Denmark	65	**Poland**	65/60
Estonia	63	**Portugal**	66
Finland	60	**Romania**	65/60
France	65	**Slovakia**	62
Germany	62-68	**Slovenia**	65
Greece	62	**Spain**	70
Hungary	62	**Sweden**	65
Iceland	67	**Switzerland**	65
Ireland	65	**UK**	65/60
Italy	65/63		
Romania has a variable retirement age			

Table 26 - Normal (state) retirement ages

This table shows the normal retirement ages for males/females in each country; the first figure is for males, the second for females and where there is a variable age between genders. NB: Slovakia has a variable retirement age for females with children

Dentists' Incomes

Dentists who work within hospitals or for the public dental service tend to be salaried employees, and considerable numbers in general practice may work that way – either as assistants to practice owners in fee-based systems, or salaried within the state system (the UK).

Liberal/General private practitioners often contract to work part-time for the public dental service on a *fee-for-service* basis.

Given that a *fee-for-service* (or *fee-per-item*) system dominates for all private practitioners across Europe, and for some dentists working from hospitals or government health centres, the process of establishing standard or maximum fees is an important part of any oral health system.

A common model for deciding standard fees is to have a points system attaching relative values to each type of treatment, to reflect relative cost. A separate process then attaches a monetary value to each point. Sometimes the monetary values attached to different treatments, are derived from an overall 'target income' figure for the average dentist. In this way it is possible for governments to exercise partial control on overall expenditure. However, although in some countries the scale is one of maximum fees, more often there are flexible rules governing when a dentist can charge above the standard fee.

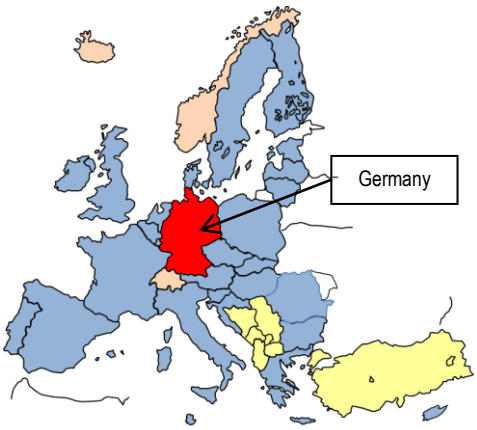
Table 27 – Tax rates in 2013

	Top rate of tax	Standard rate of VAT		Top rate of tax	Standard rate of VAT
Austria	50.0%	20%	Latvia	24.0%	21%
Belgium	53.5%	21%	Lithuania	20.0%	21%
Bulgaria (1)	10.0%	20%	Luxembourg	49.0%	15%
Croatia	40.0%	25%	Malta (6)	35.0%	18%
Cyprus	35.0%	18%	Netherlands (7)	52.0%	21%
Czech Republic (2)	22.0%	21%	Norway	54.3%	25%
Denmark	51.5%	25%	Poland	32.0%	23%
Estonia (1)	21.0%	20%	Portugal	45.0%	23%
Finland	31.75%	24%	Romania (1)	12.0%	24%
France	49.0%	20%	Slovakia	25.0%	20%
Germany	45.0%	19%	Slovenia	50.0%	22%
Greece (3)	42.0%	23%	Spain (8)	30.5%	21%
Hungary (1)(4)	16.0%	27%	Sweden	57.0%	25%
Iceland	46.22%	25.5%	Switzerland	42.0%	8%
Ireland (5)	41.0%	23%	United Kingdom	45.0%	20%
Italy	43.0%	22%			

Source: various

(1) Flat rate
(2)) Dental consummables VAT is 15%. Tooth whitening 21%
(3) VAT is 13% for intra-oral materials
(4) VAT 5% for medicaments, 15% for materials
(5) VAT 21% on dental equipment and materials
(6) Some dental materials are charged at a lower VAT rate
(7) A lower VAT rate of 6% is applied to dental materials
(8) Lower VAT rate of 10% on dental equipment

Germany



In the EU/EEA since	1957
Population (2013)	80,523,746
GDP PPP per capita (2012)	€29,773
Currency	Euro
Main language	German

There is a long established insurance based healthcare system of "sick funds", which are not for profit organisations. Almost 90% of the population belong to one of the 134 funds. There is also wide use of private insurance. In 2013, were 43 private health insurance funds plus a rising number of insurance companies offering supplementary health insurance outside of their core business. Dental fees, both inside and outside sick funds and insurance based care, are regulated.

Number of dentists:	88,882
Population to (active) dentist ratio:	1,163
Members of Dental Association:	100%

The use of dental specialists and the development of dental auxiliaries are both well advanced. The national federation of Chambers is known as the Bundeszahnärztekammer (BZÄK) and all dentists must be a member of the local Chamber.
Continuing education for dentists has been mandatory since 2004 for all dentists practising in the health fund system.

Date of last revision: 27th January 2015

Government and healthcare in Germany

Germany is one of the founder members of the EU. Its federal system of government delegates most of the responsibility for expenditure and many policy decisions to the regional level which also has additional powers to raise local taxes.

The capital is Berlin.

There is a bicameral Parliament, which consists of the Federal Assembly or *Bundestag,* with approximately 600 seats, elected by popular vote under a system combining direct and proportional representation (a party must win 5% of the national vote or three direct mandates to gain representation; members serve four-year terms) and the Federal Council or *Bundesrat* (69 votes; state governments are directly represented by votes; each has 3 to 6 votes depending on population and the representatives of each state are required to vote as a block).

Elections for the Federal Assembly are held every 4 years (or less). There are no elections for the *Bundesrat*; the composition is determined by the composition of the state- governments so the *Bundesrat* has the potential to change any time one of the 16 states (*Länder*) holds an election.

The President of Germany is elected for a five-year term by a Federal Convention including all members of the Federal Assembly; the Chancellor (equivalent to Prime Minister) is elected by an absolute majority of the Federal Assembly for a four-year term.

There is a long-established statutory health insurance system where health care depends on membership of a "sick fund". Sick funds are state-approved health insurance organisations. In 2013 there were 134 in the country. There are also private insurance organisations (43 in 2013).

Approximately 90% of the population are members of a state-approved sick fund, which provides a legally prescribed standard package of healthcare.

The sick funds are "not for profit" organisations. Membership is mandatory for all employees with an income of less than €4.350 gross/month. As of January 1st, 2009, premiums are the same across all statutory sick funds (15.5%) and are split fairly equally between employers (47%) and employees (53%). Individuals whose monthly gross income exceeds a certain amount (€4,462.50 in 2014) may opt out of the state-approved insurance system and join a private insurance scheme. For self-employed persons and certain groups of professionals (e.g. civil servants) membership of a private insurance scheme is mandatory.

Private insurance schemes are regulated by insurance law only and may thus offer more flexible packages of care. For example, the schemes carry all the financial risks of treatment or reimburse only a defined percentage of the costs and the premiums vary according to the level of cover required and the age or past health of the member. Membership of a private sick fund is also a personal contract, so in contrast to state-approved sick funds dependants cannot be co-insured.

The actual provision of health care in the statutory system is managed jointly by the sick funds, and the doctors' and dentists' organisations. As with many other aspects of German legislation, responsibilities are split between the federal level and the regional level of the *Länder*.

		Year	Source
% GDP spent on health	11.3%	2011	OECD
% of this spent by government	76.5%	2011	OECD

Oral healthcare

Public health care

The key organisations in oral healthcare delivery are:

Sick funds	In January 2013, there were 134 state-approved sick funds in Germany, organised broadly into five main groups. The number of state-approved sick funds has decreased considerably over the last years, due to changed regulation regarding minimum number of members etc., but also due to an increasing consolidation of the market (mergers or closures of sick funds). They are self-governing not-for-profit insurance bodies, jointly managed by employers' and employees' representatives. They generally insure employees whose incomes exceed a specified amount. Their dependants (non-working spouses and children) are usually co-insured under the same contract.
Private Insurances	These are 'for-profit organisations' which may insure those who are not compulsory members of a sick fund. The activities of the private insurance companies are only regulated by general insurance law.
KZVs	KZVs are the 17 self-governing regional authorities, which every dentist has to be a member of in order to give dental treatment to patients within the framework of the social security system. The KZVs are the key partners of the sick funds, holding budgets and paying dentists.
KZBV	This is the national legal entity of KZVs, which together with the sick funds defines the standard package of care benefits within the legal framework. It also provides support services to the regional KZVs.
Dental Chambers	The 17 Dental Chambers (*Zahnärztekammern)* at the Länder level are the traditional professional associations (legal entities). It is their responsibility to represent the interests of the profession, but also to protect the public's health. Every dentist has to be a member of a Dental Chamber.
BZÄK	The *Bundeszahnärztekammer* is the voluntary union of the Dental Chambers at a national level. It represents the common interests of all dentists on a national and international level.

The delivery of oral health care in the statutory system is organised by the federal dental authority (the *Kassenzahnärztliche Bundesvereinigung* or *KZBV*) nationally, and locally by the regional dental authorities (the *Kassenzahnärztliche Vereinigungen*, or *KZV*) in partnership with the sick funds. There are 17 KZVs within the 16 German *Länder*, (one for each state, with two for North Rhine-Westphalia, the largest state). They represent all dentists who are entitled to give treatment to patients within the framework of the statutory health insurance system.

The main functions of the KZVs are:

- to ensure the provision of dental care to all members of sick funds and their dependants
- to supervise and control the duties of member dentists
- to negotiate contracts with regional associations of sick funds
- to protect the rights of member dentists
- to establish and manage committees for the examination and admission of dentists, and the resolution of disputes
- to collect the total fees from the sick funds and distribute them to member dentists
- to maintain the dental register
- to appoint dental representatives on admission, appeal and contract committees and for regional arbitration courts

Benefits in the legal system

In principle, membership of a statutory sick fund entitles all adults and children to receive care from the statutory health insurance system. The sick funds offer full compensation for all medically necessary conservative and surgical dental treatment as well as necessary orthodontist care for persons aged less than 18. Persons under 18 are also entitled to receive certain prophylactic treatments free of charge. Dental treatments exceeding the pre-defined scope of necessary care as well as dental protheses are subject to co-payments of the insured person. Those co-payments can be reduced if the patient takes measures to maintain healthy teeth. In a typical year approximately 75% of adults and children use the system.

		Year	Source
% GDP spent on oral health	0.11%	2011	OECD
% OH expenditure private	No data	2007	CECDO

Before seeking general care from the statutory health system, the patient must have a voucher from the sick fund. This voucher is both a certificate to demonstrate entitlement to care, and also the dentist's claim form for reimbursement of the care provided. The patient hands the voucher to the dentist at the first visit. The dentist then treats the patient and quarterly forwards the completed vouchers to the KZV, which checks the invoices, sends them to the 'sick funds', collects the money from the 'funds' and pays the total amount to the practitioner.

For prosthetic treatment, all legally insured persons may choose between a private health insurance and the statutory scheme – but it is mandatory to be insured in one or the other.

Usually, most adults have their oral health checked on an annual basis.

Private insurance for dental care

Persons not required or not entitled to participate in the statutory scheme can apply for insurance cover from a private health insurance company – for example, this applies to freelance workers and members of the liberal professions, civil servants and employees with incomes above the limit for compulsory insurance. The scope of coverage is subject to individual agreements between the insurance company and the patient. This implies that coverage can be flexibly adjusted to each individual's needs.

By the end of 2012, about 9.8 million people were covered by comprehensive private health insurance policies. As of June 2013, there were 43 private insurers exclusively offering health care coverage, with the legal form either of public limited liability companies or of mutual insurance funds, organised on a cooperative basis. In addition, there is a growing number of insurers offering health care coverage outside of their core business. The private health insurance companies differ appreciably in economic significance and size - the four largest companies, with some 4.5 million comprehensively insured persons, account for more than 50% of the total.

Less than 2% of all dentists in active practice treat only patients with private insurance schemes, that is to say they have no contract with the statutory sick funds.

The Quality of Care

The standards of dental care are monitored by a federal committee on guidelines for dental care (the *Gemeinsame Bundesausschuss*). Both the sick funds and the federal authority for dental care (the *Kassenzahnärztliche Bundesvereinigung*) are represented on this committee. Its main role is to determine the range of medically necessary treatments which are to be covered by the statutory sick fund system. This includes the approval of new treatments or the use of new materials. Another responsibility of the committee is to determine the value of any treatment relative to other items of care.

Routine monitoring is carried out by the *KZV* and consists of checking invoices and the amount of work provided by each dentist. Dentists providing substantially more or less than the average of particular treatments are required to explain the anomaly. Other measures of quality assurance are patient complaints and expert opinion procedures.

For dentists in free practice the controls for monitoring the standard of care are those described above. The same monitoring framework also applies to patients who pay the whole cost of care themselves; their bills do not need to be submitted to any external body for approval, but influence is exercised by the insurance companies who reimburse the payment. The threat of patient complaints has a direct effect on the quality of care for most dentists.

Domiciliary (home) care is provided both by self-employed dentists for their respective patients, or by those contracted with a residential home for the elderly or another institution.

Health data

		Year	Source
DMFT at age 12	0.70	2009	WHO
DMFT zero at age 12	70.1%	2007	CECDO
Edentulous at age 65	23.0%	2007	CECDO

"DMFT zero at age 12" refers to the number of 12 years old children with a zero DMFT. "Edentulous at age 65" refers to the numbers of over 64s with no natural teeth

DMS IV refers to Micheelis, W., Schiffner, M.: Vierte Deutsche Mundgesundheitsstudie (DMS IV). Institut der Deutschen Zahnärzte, Deutscher Zahnärzteverlag, Cologne 2006

Fluoridation

There is no water or milk fluoridation, but extensive salt fluoridation. In 2010, 68.3% of all consumed table salt contained fluoride as an additive.

Education, Training and Registration

Undergraduate Training

To enter dental school a student has to have passed the general qualification for university entrance (*Abitur/ Allgemeine Hochschulreife*) and achieved a successful result in a Medical Courses Qualifying Test.

Year of data:	2012
Number of schools	30
Student intake	2,222
Number of graduates	1,813
Percentage female	61.9%

All but one of the dental schools are publicly funded and are part of the Colleges of Medicine of Universities. There is only one private dental school offering undergraduate training, in Witten-Herdecke. The undergraduate course lasts 5 years and 6 months.

In 2012, there were about 2,100 places at the publicly funded dental schools, for entry (thus, excluding any figures for the private university at Witten-Herdecke). However, more students actually enter dental schools, because there are more applicants and dental schools are forced to accept the excess students who pass the entrance examinations (*Numerus Clausus*). So, the real number of undergraduate students entering dental schools was over 2,200, and the estimated number of all dental under-graduates was over 13,000.

Quality assurance for the dental schools is provided by control mechanisms and regulations of the universities, and the Ministry of Science and Education in each state.

Qualification and Vocational Training

Primary dental qualification

The main degree to be included in the register is *Zeugnis über die zahnärztliche Staatsprüfung* (the state examination certificate in dentistry).

Vocational Training (VT)

In order to register as a dentist and provide care within the statutory sick fund system, a German dentist with a German state exam pass must have two years of approved supervised experience, in addition to the five and a half years of dental training at university. A dentist can then apply to the admission committee of the *Kassenzahnärztliche Vereinigungen* (*KZV*).

The conduct of an independent dental practice providing treatment under the statutory health insurance scheme demands extensive professional and management knowledge and skills: knowledge of law applicable to health insurance practitioners and to the profession, of manage-ment, of educational skills for the training of dental auxiliaries, organisational talent in the conduct of a practice and familiarity with the institutions involved in dental self-government and their functions. Hence work as an assistant is intended principally to prepare young dentists to cope with the many different kinds of problems associated with the running of a practice of their own.

There is no obligatory formal training for the assistants – however, courses are offered on a voluntary basis by most of the dental chambers providing a broad and systematic knowledge in all aspects of running a practice. There is no leaving examination – proof of participation in two years (full-time) assistant training is sufficient.

Dentists from EU member countries with an EU diploma are not required to have the additional two years' experience.

Registration

Applications are made to the KZV for registration and have to be supported by degree certificates and a letter of good standing from the dentist's current registering body. In 2012, there were 1, 195 new admissions, while in the same year 1,561 approved dentists stopped being active in their own practice, due to retirement, change of employment status or for other reasons.

The cost of registration is included in the subscription fee payable to the KZV (€100 in 2013).

Language requirements

There are no national regulations regarding the necessity for German language skills for non-German dentists who want to practice in Germany. Those matters are usually decided at *Länder* level and a number of states have introduced compulsory language tests over the last few years. In 2013, however, it was decided to introduce uniform regulations on language requirements nationwide in the near future.

Further Postgraduate and Specialist Training

Continuing education (CE)

In Germany there is an ethical obligation to participate in continuing education. The costs for participation in continuing education courses are deductible from income tax as a practice expense.

New legislation on health care (*Gesundheitssystem-Modernisierungsgesetz*, GMG 2003) introduced, from January 2004, compulsory CE and regular monitoring in the form of recertification for all dentists providing care in the statutory sick fund system. The content and amount of the compulsory CE was defined by the KZBV, in agreement with BZÄK, in June 2004. There is a great variety of different training offers and participation is rewarded with a predefined number of CE credit points, depending on the scope and type of the course. In principle, the dentist is free to choose among the training offers, but has to gain at least 125 CE credit points over a five years period. Non-compliance will lead to payment cuts on the part of the KZVs, or even withdrawal of the right to practise, in the statutory health care system.

For dentists exclusively providing care outside of the statutory system, there are no formal regulations as to the extent of continuing education.

Postgraduate Master's programmes

In recent years, postgraduate Master's studies have been established by the universities, mostly part-time alongside work, for example in implantology, functional therapy, periodontics, endodontics, orthodontics, surgery, aesthetics, lasers in dentistry.

The courses cover about 60 – 120 ECTS (European Credit Transfer System in which 1 ECT equals 25 to 30 hours workload) and the final examination is for a Master's degree (MSc).

Specialist Training

Three dental specialties are recognised throughout Germany

- Oral Surgery
- Orthodontics
- Dental Public Health

The speciality "Periodontology" is only recognised by the dental chamber in the region Westfalen-Lippe.

Training for all specialties lasts four years and takes place in university clinics or recognised training practices, except Dental Public Health, which is trained in its own environment.

- An orthodontist would receive the *Fachzahnärztliche Anerkennung für Kieferorthopädie* (certificate of orthodontist), issued by the *Landeszahnärztekammern* (Chamber of Dental Practitioners of the *Länder*), as the outcome to training.
- An oral surgeon would receive the *Fachzahnärztliche Anerkennung für Oralchirurgie/Mundchirurgie* (certificate of oral surgery), issued by the *Landeszahnärztekammern*.
- For periodontists the equivalent to the certificate for orthodontists and oral surgeons (certificate of periodontology issued by the *Zahnärztekammer* Westfalen-Lippe) is awarded.
- For Dental Public Health the dentist will receive the title *Zahnarzt für Öffentliches Gesundheitswesen* (Public Health Dentist), if he has passed an examination at an academy for public health (*Akademie für Öffentliches Gesundheitswesen*).

In principle, there is no limitation in the number of trainees, because there are sufficient dentists in free practice with the permission to train a dentist in orthodontics or oral surgery. However, the fact that all dentists who want to specialise have to attend university for one year limits access to specialist training. The trainee has the status of an employee and gets a salary from his or her employer (ie a dentist in free practice with the special permission to train specialising dentists, a university or a hospital).

After completion of the specialised training the trainee has to pass an examination organized under the responsibility of the dental chamber. He or she is then approved as a specialist and registered with the dental chamber as such.

Workforce

Dentists

During recent years, between 1,500 and 2,100 dentists a year received their dental approbation. Consequently, the number of active dentists is increasing. A change of legislation, effective from 2007, has led to an increase in the number of dentists employed in a practice rather than running their own practice.

Year of data:	2012
Total Registered	88,882
In active practice	69,236
Dentist to population ratio*	1,163
Percentage female	42%
Qualified outside Germany**	2,164

* active dentists only
** excl. State of Schleswig-Jolstein

There is some small reported dentist unemployment.

Movement of dentists across borders

In 2012, there were 2,164 dentists who qualified abroad active in Germany. There are no figures on how many German qualified dentists are practising outside Germany.

Specialists

Specialists work mainly in private practice, hospitals and universities while those specialists in Dental Public Health are largely located in the public dental service or are employed directly by the sick funds. There are many regional associations and societies for specialists.

Year of data:	2012
Orthodontics	3,443
Endodontics	
Paedodontics	
Periodontics	
Prosthodontics	
Oral Surgery	2,552
Dental Public Health (estimated)	460

There are no limitations on the ratio of specialists to other dentists in Germany and there is no compulsory referral system for access to them. In general, patients are referred from the general dentist to a specialist, however, the patient may also visit the specialist without referral.

Auxiliaries

Auxiliary personnel can only work under the supervision of a dentist, who is always responsible for the treatment of the patient. They cannot practice independently.

The range of auxiliaries is fairly complex, leading progressively (with training) from Dental Chairside Assistant (*Zahnmedizinische Fachangestellte*) to Dental Hygienist (*Dentalhygieniker*). Registered *Zahnmedizinische Fachangestellte* may qualify as *Zahnmedizinische Fachassistentin (Specialised Chairside Assistant, ZMF), Zahnmedizinische Verwaltungsassistentin (Dental Administration Assistant, ZMV), Zahnmedizinische Prophylaxeassistentin (Dental Prophylaxis Assistant, ZMP)* or *Dentalhygieniker* (Dental Hygienist). These registerable qualifications do exist in almost all *Länder* and are co-ordinated by the *Bundeszahnärztekammer* (BZÄK).

Year of data:	2011
Hygienists	550
Technicians	58,000
Denturists	0
Assistants	182,000
Therapists	0
Other	0
All figures estimated	

Dental Chairside Assistants (Zahnmedizinische Fachangestellte)

The main type of dental auxiliary is *Zahnmedizinische Fachangestellte.* After 3 years training in a dental practice, attendance of a vocational school and a successful examination conducted by the Dental Chamber, they are awarded a registerable qualification.

Specialisations of Dental Chairside Assistants

There are 3 types of specialisations of Dental Chairside Assistants (*Zahnmedizinische Fachangestellte):* ZMF, ZMP and ZMV.

- *Zahnmedizinische Fachassistentin (Specialised Dental Assistant, ZMF)*: requires 700 hours training at a Dental Chamber, and their duties include support in prevention and therapy, organisation and administration, and training of *Zahnmedizinische Fachangestellte*.
- *Zahnmedizinische Prophylaxeassistentin (Dental Prophylaxis Assistant, ZMP)*: requires a minimum 400 hours training at a Dental Chamber, and their duties include support in prevention/prophylaxis, motivation of patients and oral health information.
- *Zahnmedizinische Verwaltungsassistentin (Dental Administative Assistant, ZMV)*: requires a minimum 350 hours training at a Dental Chamber, and their duties include support in organisation, filing and training of *Zahnmedizinische Fachangestellte*.

There is no available data about numbers of each group.

Dental Hygienists (Dentalhygieniker)

To become a hygienist a student needs to undergo 3 years training, pass an examination as a dental chairside assistant, 300 - 700 hours training and an examination as ZMP or ZMF first, followed by a further 800 hours training and an examination conducted by the dental chamber. Their duties include advice and motivation of patients in prevention, therapeutic measures for prophylaxis and scaling of teeth. They are normally salaried.

Dental Technicians (Zahntechniker)

Dental technicians are also not permitted to treat patients. They are trained for 3 years, 40% in a vocational school and 60% in the dental laboratory. After a successful examination conducted by the Chamber of Handicraft they are awarded a registerable qualification. However, only those who run a technical laboratory register (with the dental technicians' guild).

A dentist may employ a *Zahntechniker* directly in his practice, but most use independent laboratories. They produce prosthodontic appliances according to a written prescription from a dentist. They do not deal directly with the public.

Practice in Germany

Numbers of dentists

Year of data:	2012
General (private) practice	66,157
General Practice as a proportion is	96%
Number of general practices	44,600
Year of data:	**2008**
Public dental service	450
University	2000
Hospital	200
Armed Forces	450
All figures estimated	

Working in Free (Liberal or General) Practice

The figures above for dentists in general practice comprise both self-employed dentists (53,767) and dentists employed in general practices (12,390).

In Germany, dentists who practice on their own or as small groups, outside hospitals or schools, and who provide a broad range of general and specialist treatments are said to be in *Free Practice.* More than 60,000 dentists work this way, which represents about 96% of all dentists registered and practising. Most of those in free practice are self-employed and earn their living through charging fees for treatments. Very few dentists (less than 2%) accept only private fee-paying patients.

Once registered with a KZV, a dentist in free practice may treat legally insured persons and claim payments from the sick fund via the regional KZV.

Fee scales

Fees are not nationally standardised. Negotiations between the national association for dental care (the KZBV) and the major sick funds establish the standard care package for people insured with legal sick funds. Using a points system, relative values are allotted to each type of treatment. It is then up to the regional associations and sick funds to decide the monetary value of each point for payments in each region.

For private patients, the levels of private fees payable are regulated by federal law and set out in the *Gebührenordnung für Zahnärzte – GOZ.* In this fee scale, the different types of treatment are described and a number of reference points are allotted to each of those. In order to calculate the price for any dental service, the respective reference points have to be multiplied by the so-called "point value", a fixed factor set at 5.62421 Euro cents (in 2013). Depending on the difficulty of the treatment required, the dentist may multiply the result with a factor of up to 3.5. A factor of 2.3 should indicate a treatment of average difficulty. If a factor higher than 2.3 is applied, the invoice must include evidence to justify the increase. An invoice with a factor higher than 3.5 requuires a written agreement by the patient. Although there is no direct link between the GOZ and the private insurances, the private insurances co-ordinate their fees with the GOZ system and reimburse for treatment accordingly, if they accept the justification of the factor increase.

As of January 1st, 2012, the GOZ was reviewed for the first time since 1988. Certain newer forms of treatment were included in the fee scale while the prices for a few others were adjusted. Much to the regret of the dentists and their professional organisations, however, the point value was not changed. Hence, the vast majority of prices remain at the level of 1988.

Joining or establishing a practice

There are no rules which limit the size of a dental practice in terms of the number of associate dentists or other staff. Premises may be rented or owned, but any obligations to the owner of the practice must not influence the clinical autonomy of the dentist. There is no state assistance for establishing a new practice and dentists must take out commercial loans or other contracts with a bank.

There are no special contractual requirements for practitioners working in the same practice but a dentist's employees are protected by national and European laws for equal employment opportunities, maternity benefits, occupational health, minimum vacations and health and safety.

Dentists can set up completely new practices, they can buy existing practices or they can buy into existing joint practices. In 2012, 12% of all new establishments were new solo practices, 61% were acquisitions of an existing solo practice and 27% were practice partnerships, either establishing a new practice partnership or joining an existing one. When existing practices are acquired, the predecessor's patient list is usually part of the deal.

Establishing a new practice means to acquire totally new patients. In 2007, limitations on establishing a practice in a special location were abolished for dentists practising under the statutory health insurance scheme. That means that a dentist may establish his or her practice wherever he or she chooses, with only financial considerations being a limiting factor. There are still planning provisions necessary but no limitations of provision. Earlier regulations regarding the maximum retirement age for dentists active under the statutory insurance system (68 years) have been abolished in the meantime.

Practices are usually located in offices or private houses or apartments, rather than in shops or malls.

The number of patients on a "list" of an average full-time dentist has been estimated at about 1,000. However, there are no reliable data available on this matter,

Working in the Public Dental Service

There is a public dental service to oversee and monitor the healthcare of the total population. The care provided is restricted to examination, diagnosis and prevention. The service employs dentists as Zahnarzt für öffentliches Gesundheitwesen.

Working in the public dental service requires postgraduate training and examination by an academy of public health. Currently the specialty of Dental Public Health is represented in most of the 16 *Länder*.

The quality of dentistry in the public dental service is assured through dentists working in teams which are led by experienced senior dentists, and the complaints procedures are the same as those for dentists working in other services.

In general, there is more part-time work available in the public dental service than in other types of dental practice. Working hours are more flexible, or are shortened to reflect the length of the school day and the percentage of female dentists working in the public dental service is much higher. Dentists with this speciality are permitted to work in liberal practice as well as in public health.

Working in Hospitals

A relatively small number of dentists work in hospitals, mostly as Oral Maxillo-Facial Surgeons. Because Oral Maxillo-Facial Surgeons may register with either a dental or a medical chamber – and probably most register with a medical chamber- there is no accurate data relating to actual numbers.

Surgeons who need in-patient care for their patients with severe diseases may use beds in public or private clinics/hospitals, but they are working in free practice and are not employed by the hospitals. Very few dental ambulatories with employed dentists exist, for example some owned by the sick funds. So, there are normally no restrictions on seeing other patients in private practice.

Working in Universities and Dental Faculties

Over 2,000 dentists work in universities and dental faculties as employees of a university. With the permission of the university, they may carry out some private practice outside the faculty.

The main academic title in a German dental faculty is that of university professor. Other titles include university assistants, Oberarzt (senior physician), and academic dentists.

As all dental schools are combined with dental clinics for outpatient and inpatient care, almost all employees at universities and dental faculties treat patients in the associated polyclinics and clinics.

There are no formal requirements for postgraduate training but professors usually qualify for the title through a process called habilitation. This involves a further degree and a record of original research. Dentists teaching at universities have to earn the “right to teach” by giving a special lecture at the faculty. Professorships are mostly filled by external candidates through competition. Apart from these, there are no other regulations or restrictions on the promotion of dentists. The complaints procedures are the same as those for dentists working in other areas, as described earlier.

Salaries differ considerably from assistant to professor. Since professors have the right to treat patients privately, their private incomes will exceed the normal salary paid by the university.

Working in the Armed Forces

There are few dentists working full time for the Armed Forces, an unreported (but increasing) number female.

Professional Matters

Professional associations

***Zahnärztekammern* (*Dental Chambers*)**

Zahnärztekammern (or Dental Chambers) are the traditional bodies which represent the interests of dentists whether active under the statutory insurance system or not. Every dentist has to be a member of a Dental Chamber. The Chambers are also responsible for other defined legal tasks.

	Number	Year	Source
Bundeszahnärztekammer	69,236	2012	BZÄK

There are 17 Dental Chambers in the 16 *Länder* and also, in some parts of the country, some subdivisions of the chamber, which work at a more local level. They are democratically elected organisations with strong traditions of self-regulation. Their main duties are:

- to create and maintain uniform professional ethics
- to advise and support members
- to organise and promote dental undergraduate and continuing education, including the training of auxiliaries
- to represent professional interests to authorities, legislative bodies, associations and in public
- to monitor the professional duties of its members
- to assure a dental emergency service
- to support quality assurance and continuing education
- to arbitrate disputes between dentists, and between dentists and patients

The Bundeszahnärztekammer (BZÄK)

The *Bundeszahnärztekammer* - BZÄK, *Arbeitsgemeinschaft der deutschen Zahnärztekammern e.V.* (German Dental Association), is the professional representative organisation for all German dentists, at federal level. Members of BZÄK are the dental chambers of the federal states (*Länder*), which send delegates to the Federal Assembly, the supreme decision making body of the *Bundeszahnärztekammer*. The Presidents of the dental chambers of the federal German states form the BZÄK-Board, together with the Federal President and the Vice-presidents.

The *Bundeszahnärztekammer* represents the health-political and professional interests of the dentists. Its supreme mission is to strive for a liberal future-orientated health care system, with the patient at the centre, and with the objective of establishing and developing a relationship between dentist and patient without any outside influence.

Since 1993, the *Bundeszahnärztekammer* has also had its own representation in Brussels, with a full-time office based near the European Commission. This office also handles the administrative functions of the Council of European Dentists.

Related bodies

The magazine *Zahnärztliche Mitteilungen (zm)* is published twice a month. It is a communication means of both the German Dental Association and Federal Dental Authority. It informs about the topics of national and international professional politics, health and social politics, of topical scientific findings and innovations as well as of dental events and meetings. It offers services covering the whole range of dental subjects: dental exercise, dental management, and dental economy.

Institut der Deutschen Zahnärzte (IDZ) the Institute of German Dentists is an institution of both the German Dental Association and Federal Dental Authority. The task of the IDZ is to initiate and implement research and practice-oriented work in the interest of the professional politics, and to act as a scientific advisory body for BZÄK and KZBV in their fields of activities.

Zahnärztliche Zentralstelle Qualitätssicherung (ZZO) The Agency for Quality in Dentistry gives advice and support to BZÄK and KZBV in all matters of dental quality.

Freier Verband Deutscher Zahnärzte e.V. (FVDZ)

The FVDZ (Liberal Association of German Dentists) is the largest liberal professional association of dentists in Germany. Since it was established in the 1950s, the FVDZ has advocated a liberal health policy in Germany, vis-à-vis politicians and the German Parliament - a health policy which is centred around the patient. In addition to its activities at national level, FVDZ plays an active role in European and international professional dental policy. The FVDZ is active in the Council of European Dentists, as well as an associate Member of the European Regional Organisation of the Fédération Dentaire Internationale (FDI).

- The objective of the FVDZ is to promote and represent the professional interests of German dentists in accordance with the principles set out in the following preamble: The purpose of the Liberal Association of German Dentists is to safeguard the free exercise of the dental profession in the best interest of the patients.
- Dentists can only fulfill their professional and ethical duties to their full extent if they can practise freely, without patronisation and with financial security.
- It is the objective of the Liberal Association of German Dentists to further the confidential relationship between patients and dentists that is necessary for dentists to fulfill their professional duties.
- The Liberal Association of German Dentists wishes to enforce these basic demands in the statutory dental corporations too.
- The entire profession is called upon to help in realising these basic demands.

Ethical Code

Dentists in Germany must work according to an ethical code which covers the relationships and behaviour between dentists, contracts with patients, consent and confidentiality, continuing education and advertising, although the latter is very strongly regulated. This code is administered by the regional dental chambers and varies slightly from region to region. The BZÄK provides a sample ethical code on which variations may be based.

The contract with the patient is usually verbal, but for complex treatments or those requiring prior approval from the sick funds, for example crowns and prosthodontic appliances, written consent and payment terms must be recorded. All treatment carried out must be recorded by the dentist and must demonstrate informed consent.

Fitness to Practise/Disciplinary Matters

If a patient complains about treatment, both the Dental Chamber and the KZV have grievance committees. Following a complaint, a second opinion is sought from an experienced, impartial dentist, appointed by the local dental chamber. If this dentist judges that the original care was unsatisfactory then the work must be repeated at no extra charge to the patient. Under both grievance procedures, the dentist has a right of appeal to the grievance committee.

For serious complaints about malpractice the dental chambers have installed boards of arbitration and courts of professional law. The sanctions from the court of professional law may be: an oral or written rebuke or admonition, administrative fine (up to €50,000), or temporary or permanent withdrawal of licence. Heavier sanctions are very rare.

Advertising

A dentist may inform the public about his professional qualifications and priorities, key aspects of his activity and of the equipment in his practice. The information must be factual, adequate, verifiable and not misleading. The regulations on advertising in dentistry were very much softened and liberalised in 2001/02 through judgements of the Federal Constitutional Court, (*Bundesverfassungs-gericht*).

The Electronic Commerce Directive has not been implemented, because existing regulations in Germany are even stronger.

Data Protection

A dentist is obliged to maintain professional secrecy. The duty of preserving medical confidentiality is an element both of the dentists' professional codes and of the criminal law. The duty of secrecy applies to all facts that have been entrusted or become known to the dentist in his or her capacity as a medical or dental practitioner. Professional secrecy must be observed not only by the dentist himself or herself, but also by his or her employees and agents and by persons working in the practice.

Patient data protection in accordance with the Federal Data Protection Law is very important due to these implications for medical professional secrecy.

Insurance and professional indemnity

Liability insurance is compulsory for dentists. Insurance is provided by private insurance companies and covers costs up to a predetermined maximum, usually €2 million. An average practitioner pays approximately €250 annually for the insurance. This insurance does not cover a dentist's practise in another EEU country, except in individual cases, or for short-term treatments - but not for permanent activity.

Corporate Dentistry

Companies or non-dentists are not allowed to be the sole owner of a dental practice – the majority of owners have to be dentists. For several years there have been moves to ease and liberalise the types of professional practice, in order to allow for more competition.

Since 2007, the employment of dentists has been facilitated and for the first time the establishment of branch dental practices and practices where members with a variety of qualifications of the medical or dental profession work together in different locations have been allowed. This means, that the establishment of mega-dental surgeries and practice chains with international investors was facilitated.

Tooth whitening

The EU Directive 2011/84/EU of September 2011, amending Directive 76/768/EEC, concerning cosmetic products, regulates the use of hydrogen peroxide and other compounds or mixtures that release hydrogen peroxide in tooth whitening or bleaching products. It establishes a new legal framework for products containing between 0.1% and 6% of hydrogen peroxide and prohibits the marketing of products containing over 6%. This means that only a dentist (or a qualified auxiliary under supervision of the dentist) may apply the whitening products. There are no reports of (continued) illegal practise.

Health and Safety at Work

Infection control is regulated by law and has to be followed by the dentist and his or her team. The responsible health authorities monitor the compliance. Non-compliance causes sanctions.

Ionising Radiation

There are specific regulations about radiation protection - the *Röntgenverordnung* (2003). Training in radio protection is mandatory for undergraduate dentists. The dentist must undergo regular mandatory continuing training in radiographic protection (every 5 years). He/She has to participate in an eight hours course. The dental assistant is only allowed to do the technical execution under the direction of the dentist.

Radiation equipment must be registered. It is technically authorised by an expert and is controlled every 5 years, but extra controls are due every time major changes in the equipment are made (for example, if newer equipment is bought).

Hazardous waste

There are regulations to cover the disposal of clinical waste (*Richtlinie für Abfallversorgung in Einrichtungen des Gesundheitswesens*).

There is a special Directive concerning amalgam separators (*Richtlinie zur Indirekteinleiter-Versorgung*), permission to load used water into public systems. Amalgam separators have been obligatory since 1990.

Regulations for Health and Safety

For	*Administered by*
Ionising radiation	Dental Chambers
Electrical installations	Factory Inspectorate
Infection control	The responsible health authorities
Medical devices	*Bundesinstitut für Arzneimittel und Medizinprodukte (BfARM)* – the Federal Institute for drugs and medical devices
Waste disposal	Dental Chambers and local authority

Financial Matters

Retirement pensions and Healthcare

The normal retirement age is 62 to 68, depending upon individual circumstances and preferences.

Retirement pensions in Germany average 60% of the salary on retirement. Any additional (insurance) pension depends on the individual contract and the amount insured. Dentists in free practice are members of a so called *Altersversorgungswerk*, a special pension fund/pool for the liberal professions, especially physicians and dentists, which is organised and supported by the chambers. Some of these old age pension funds are organised in cooperation with the physicians' chambers, some are for dentists only.

Taxes

National income tax:

In 2013, there was a basic tax-free allowance (*Steuerfreibetrag*) of €8,131 for singles and twice as much for a married couple.

In addition to a basic allowance for low-income earners, there are numerous deductibles for taxes, such as deductions for raising children, commuting to work, paying for work uniforms, being a single parent, joining a trade union, contributing to private pension funds, selected insurance premiums, donating to charity, etc.

The starting rate for the lowest taxable income is 14%. The tax rate then rises progressively: so that for annual gross incomes between €8,131 and €13,469, the rise is steep, followed by a more gradual rise for incomes of up to €52,881. Incomes higher than this are subject to a tax rate of 42%. For top incomes of over €250,730 (€500,000 for married persons) the highest tax rate of 45% applies.

In addition, there is a so-called solidarity surcharge (5.5% of the income tax).

VAT/sales tax

The value added tax rate of 19% on purchases has applied since 2007. There is a reduced rate of 7% on certain items and services (including foodstuffs, books, medical, passenger transport, newspapers, admission to cultural and entertainment events, hotels and the costs of production of a dental prosthesis).

Various Financial Comparators

Berlin ***Zurich = 100***	**2003**	**2012**
Prices (including rent)	71.9	62.5
Wage levels (net)	54.5	52.9
Domestic Purchasing Power	65.0	74.2

Source: UBS August 2003 and November 2012

Other Useful Information

Main national associations and Information Centre:	***BZÄK Brussels office***
Bundeszahnärztekammer (BZÄK) Chausseestr. 13 10115 Berlin Tel: +49 30 40005 0 Fax: +49 30 40005 200 Email: info@bzaek.de Website: www.bzaek.de Kassenzahnärztliche Bundesvereinigung (KZBV) Universitätsstr. 73 50931 Köln Telefon: +49 221 4001 0 Telefax: +49 221 40 40 35 Email: post@kzbv.de Website: www.kzbv.de Freier Verband Deutscher Zahnärzte e.V. Bundesgeschäftsstelle Mallwitzstraße 16, 53177 Bonn Tel: +49 228 8557 0 Fax: +49 228 3406 71 Email: info@fvdz.de Website: www.fvdz.de	Bundeszahnärztekammer (BZÄK) Büro Brüssel 1, Avenue de la Renaissance B-1000 Brussels Belgium Phone: +32 2 7 32 84 15 Fax: +32 2 7 35 56 79 E-mail: info@bzaek.eu
Competent Authority:	
(For articles 2 & 3) Bundesministerium für Gesundheit Rochusstr. 1 53123 Bonn Tel: +49 228 308 3515 Fax: +49 228 930 2221 Email: info@bmg.bund.de Website: www.bmg.bund.de	(For specialist diplomas contact the dental chambers of the relevant "Länder") Lists available from the Bundeszahnärztekammer
Publications:	***Employment bureaux, and other bodies or publications with information on vacancies for dentists:***
Zahnärzliche Mitteilungen, and regional dental journals (each *Zahnärztekammer* and *Kassenzahnärztliche Vereinigung* publishes its own dental journal)	*Employment bureaux:* Bundesagentur für Arbeit Regensburger Str. 104 90478 Nürnberg Email: zentrale@arbeitsagentur.de Website: www.arbeitsagentur.de

Dental Schools:

The figures refer to places at the dental school available for entry each year, due to Numerus Clausus. The actual number of students may exceed these figures, because there are usually an excess of applicants over places. Consequently, dental schools are forced to accept some more students.

Aachen

Medizinische Fakultät an der
Rhein – Westf. Techn. Hochschule
Aachen
Universitätsklinikum
Pauwelsstrasse 30, 52074 Aachen
Tel: +49 241 800
Fax: +49 241 8888 100
Email: info@ukaachen.de
Website: www.ukaachen,de

Number of students: 60

Berlin

Charité-Universitätsmedizin
Campus Benjamin Franklin
Centrum für Zahn-, Mund- und Kieferheilkunde
Assmannshauser Strasse 4-6,
14197 Berlin
Tel: +49 30 450-5620
Fax: +49 30 450-562922
Website: www.charite.de

Number of students: 80

Bonn

Zentrum für Zahn-, Mund- und Kieferheilkunde der Universität Bonn
Welschnonnenstr. 17
53111 Bonn
Tel: +49 228 287-22413
Fax: +49 228 287 22588
Email: mkg@uni-bonn.de
Website: www.zmk.uni-bonn.de/

Number of students: 69

Dresden

Universitätsklinikum Carl Gustav
Carus der Technischen
Universität Dresden
Zentrum für
Zahn-, Mund-, und Kieferheilkunde
Fetscherstrasse 74, 01307 Dresden
Tel: +49 351 458 2713
Fax: +49 351 458 5381
Email: uzm@uniklinikum-dresden.de
Website: www.uniklinikum-dresden.de

Number of students: 57

Düsseldorf

Zentrum für Zahn-, Mund- und Kieferheilkunde
der Heinrich-Heine-Universität
Westdeutsche Kieferklinik
Moorenstr. 5
40225 Düsseldorf
Tel: +49 211 811 8819
Fax: +49 211 811 6280
Website: www.zmk.uni-duesseldorf.de

Number of students: 54

Erlangen

Mund-,Kiefer- und Gesichtschirurgische Klinik
der Universität Erlangen-Nürnberg
Glückstr. 11
91054 Erlangen
Tel: +49 9131 853 4201
Fax: +49 9131 853 3603
Email: info@dent.uni-erlangen.de
Website: www.dent.uni-erlangen.de

Number of students: 108

Frankfurt

Zentrum der Zahn-, Mund- und Kieferheilkunde
des Klinikums der Johann Wolfgang Goethe-Universität
Frankfurt
Theodor-Stern-Kai 7
60590 Frankfurt am Main
Tel: +49 69/6301 1
Fax: +49 69/ 6301 6741
Website: www.med.uni-frankfurt.de/zahnklinik/

Number of students: 119

Freiburg

Universitätsklinik für Zahn-, Mund- und
Kieferheilkunde der Universität Freiburg
Hugstetter Str. 55
79106 Freiburg i.Br.
Tel: +49 761/270 4700
Fax: +49 761/270 20200
Email: info@uniklinik-freiburg.de
Website: www.uniklinik-freiburg.de

Number of students: 86

Giessen

Med. Zentrum für Zahn-, Mund- und Kieferheilkunde
an der Justus-Liebig-Universität Gießen
Schlangenzahl 14
35392 Gießen
Tel: +49 641 99 46 100
Fax: +49 641 99 46 209
Email:
Website: www.ukgm.de

Number of students: 71

Göttingen

Zentrum für Zahn-, Mund- und Kieferheilkunde
der Universität Göttingen
Robert-Koch-Str. 40
37075 Göttingen
Tel: +49 551 39 0
Fax: +49 551 39 12 653
Email:
Website: www.zmk.med.uni-goettingen.de
Number of students: 82

Greifswald

Ernst-Moritz-Arndt-Universität Greifswald
Zentrum für Zahn-, Mund- und Kieferheilkunde
Walter-Rathenau-Str. 42
17489 Greifswald
Tel: +49 3834 86 19600
Fax: +49 3834 86 50 10
Website: www.dental.uni-greifswald.de

Number of students: 45

Halle/Saale

Martin-Luther-Universität Halle-Wittenberg
Universitätspoliklinik für Zahnerhaltungskunde und Parodontologie
Grosse Steinstrasse 19
06108 Halle/Saale
Tel: +49 345 557 37 62
Fax: +49 345 557 37 73
Website: www.medizin.uni-halle.de

Number of students: 40

Hamburg

Universitätsklinikum Hamburg-Eppendorf
Zentrum fur Zahn Mund-und Kieferheilkunde
Martinistr. 52
20246 Hamburg
Tel: +49 40 74 10 0
Fax: +49 40 74 10 40236
Email: info@uke.uni-hamburg.de
Website: www.uke.uni-hamburg.de

Number of students: 68

Hannover

Medizinische Hochschule Hannover
Zentrum Zahn-, Mund- und Kieferheilkunde
Carl-Neuberg-Straße 1
30625 Hannover
Tel: +49 511 532 -4763
Fax: +49 511 532-4740
Email: MKG-Chirurgie@mh-hannover.de
Website: www.mh-hannover.de

Number of students: 79

Heidelberg

Universitätsklinik für Mund-, Zahn- und Kieferkrankheiten
Im Neuenheimer-Feld 400
69120 Heidelberg
Tel: +49 6221 56-0
Fax: +49 6221 56 5999
Email: contact@med.uni-heidelberg.de
Website: www.klinikum.uni-heidelberg.de

Number of students: 81

Homburg (Saar)

Universitätsklinikum des Saarlandes
Kliniken für Zahn-, Mund- und Kieferkrankheiten
Kirrberger Str. 100
66421 Homburg/Saar
Tel: +49 6841 160
Fax: +49 6841 162 - 49 54
Email:
Website: www.uniklinikum-saarland.de

Number of students: 25

Jena

Zentrum für Zahn-, Mund- und Kieferheilkunde an der Medizinischen Fakultät der
Friedrich-Schiller-Universität Jena
An der Alten Post 4
07743 Jena
Tel: +49 3641 93 44 10
Fax: +49 3641 93 44 11
Email:
Website: www.zzmk.uniklinikum-jena.de

Number of students: 57

Kiel

Universitätsklinikum Schleswig-Holstein
Standort Kiel
Klinik für Zahnerhaltungskunde und Parodontologie
Arnold-Heller Str. 3
24105 Kiel
Tel: +49 431 597 2781
Fax: +49 431 597 4108
Email: info@uksh.de
Website: www.uksh.de

Number of students: 67

Köln

Zentrum für Zahn-, Mund- und Kieferheilkunde
der Uniklinik Köln
Kerpener Str. 32
50931 Köln
Tel: + 49 221 478 0
Fax: + 49 221 478 40 95
Email:
Website: www.zahnklinik.uk-koeln.de

Number of students: 61

Leipzig

Universitätsklinikum Leipzig
Zahnkliniken
Liebigstr. 10-14
04103 Leipzig
Tel: +49 341 9721 000
Fax: +49 341 9721 219
Email: zzmk@uniklinikum-leipzig.de
Website: www.uniklinikum-leipzig.de

Number of students: 51

Mainz

Johannes Gutenberg-Universität,
Klinik und Polikliniken für Zahn-
Mund- und Kieferkrankheiten
Augustusplatz 2
55131 Mainz
Tel: +49 6131 17 3041
Fax: +49 6131 17 66 02
Email:
Website: www.unimedizin-mainz.de

Number of students: 98

Marburg a. d. Lahn

Med. Zentrum für Zahn-, Mund- und Kieferheilkunde
der Philipps-Universität
Georg-Voigt-Str. 3,
35039 Marburg
Tel: +49 6421 58 63 20 0
Fax: +49 6421 58 63 20 4
Email: mzzmk@med.uni-marburg.de
Website: www.uni-marburg.de/zahnmundkiefer/

Number of students: 69

München

Ludwig-Maximilians-Universität
Klinik und Poliklinik für Zahn-, Mund- und Kieferkrankheiten
Goethestr. 70, 80336 München
Tel.: +49 89 5160 9301
Fax: +49 89 5160 9302
Email:
Website: klinikum.uni-muenchen.de

Number of students: 119

Münster

Westfälische Wilhelms-Universität Münster, Zentrum für Zahn-, Mund- und Kieferheilkunde, Waldeyerstr. 30, 48149 Münster

Tel: +49 251 83 45 50 0
Fax: +49 251 83 47 89 4
Email:
Website: www.uni-muenster.de

Number of students: 115

Regensburg

Klinikum der Universität Regensburg
Klinik und Poliklinik für Mund-, Kiefer- und Gesichtschirurgie
Franz-Josef-Strauss-Allee 11
93053 Regensburg
Tel: +49 941 944 0
Fax: +49 941 944 44 88
Email:
Website: www.uniklinikum-regensburg.de

Number of students: 86

Rostock

Universität Rostock
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Number of students: 25

Tübingen

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Number of students: 102