

Council of European Dentists

MANUAL OF DENTAL PRACTICE 2014

United Kingdom

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The revised EU Manual of Dental Practice (Edition 5) was commissioned by the Council of European Dentists¹ 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 Committee.

About the authors²

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 2004.

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.

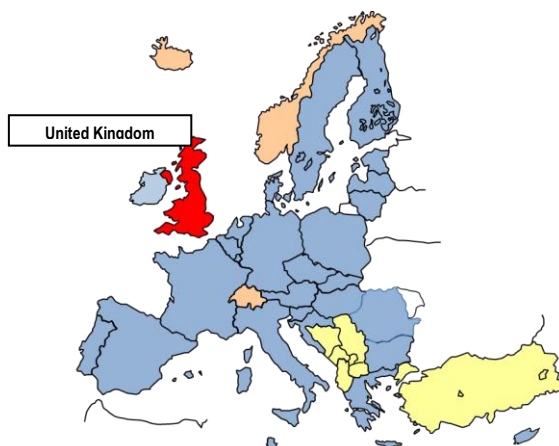
In 2010 Emma joined Cardiff Unit for Research and Evaluation in Medical and Dental Education (CUREMeDE) as a Research Associate. Working in close collaboration with the Wales Deanery, (School of Postgraduate Medical and Dental Education), her work focuses on topics around continuing professional development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

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The United Kingdom



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In the EU/EEA since	1973
Population (2013)	63,887,988
GDP PPP per capita (2012)	€28,158
Currency	British Pound £ €1.20 = £1.00 (2013)
Main language	English Also Welsh & Gaelic

The National Health Service (NHS) is largely funded through general taxation and providing healthcare to all. Approximately 80% of NHS funds are from general taxation, with the balance coming from charges to patients for prescriptions, dental & optical care. About 40% of all primary dental care is paid from the state system and the balance is through patients' co-payments and fully private practice. Each country of the UK has its own variation of the arrangements for NHS care.

Number of dentists:	38,934
Population to (active) dentist ratio:	1,936
Membership of the Dental Association:	50%

Specialists are widely used and the use of clinical auxiliaries is well developed.

Participation in continuing education is mandatory for all registered dentists and dental auxiliaries, whether in clinical practice or not.

Government and healthcare in the UK

The United Kingdom of Great Britain and Northern Ireland is both a parliamentary democracy and a monarchy. Although the Queen plays a ceremonial part in the legislative process, the parliament is bi-cameral. The first chamber of locally elected members, the House of Commons, is the main forum for debating and changing government policies. The second chamber, the House of Lords, is a fully appointed one, with a small proportion of members being hereditary peers. It plays a significant part in the revision and passing of legislation. Politics in the UK is historically polarised between three main political parties: the Labour Party, Conservative Party and Liberal Democrat Party.

The Government is led by a Prime Minister with a cabinet of Ministers called Secretaries of State. Most Ministries with a seat in the Cabinet represent particular aspects of the economy such as Health or Business. Some powers, in particular health, have been devolved to varying degrees to an elected Parliament in Scotland and Assemblies in Wales and Northern Ireland. The UK's capital is London.

The UK has had a comprehensive *National Health Service* (NHS) since 1948, which is largely funded through general taxation and provides healthcare to all. Approximately 95% of NHS funds are provided by general taxation, with the balance coming from charges to patients for prescriptions, dental and optical care.

The amount of funding to the NHS is decided by the Parliaments and Assemblies. Policy is implemented by the Departments of Health in the four home countries. The

systems for implementation vary. In England, a statutory body called NHS England and its area teams take forward commissioning of healthcare, while in Scotland, Northern Ireland and Wales, this is done through regional health boards.

All forms of primary *medical* care services are free at the point of delivery, for all adults and children and there is a nationwide system of patient registration with general medical practitioners. These medical practitioners (GPs) also act as 'gatekeepers' to the rest of the NHS with most access to specialist and hospital services being via a GP referral.

Funding of NHS drug prescriptions, dental and optical services has gradually altered to the point where many in the population now pay a significant contribution to the cost of these services. Indeed, the effect of an increased expenditure by patients on private oral healthcare and the high proportion paid by them as co-payments, when obtaining treatment in the dental NHS, means that patients are funding directly about 60% of all spending on dentistry, with only 40% being funded by general taxation.

Both in terms of funding and population coverage, private health insurance is a small but growing part of medical healthcare.

	Year	Source
% GDP spent on health	9.4% 2011	OECD
% of this spent by governm't	83.2% 2010	OECD

Oral healthcare

National Health Service (NHS)

Oral healthcare in the UK is available from the NHS or privately. As with other European countries, the majority of care is provided by non-salaried dental practitioners, working outside hospitals usually in privately owned premises. These *General Dental Practitioners* (GDPs), if they accept NHS patients, are part of the “*General Dental Service*”, which is locally coordinated by health authorities as described earlier. GDS contracts are “open-ended”, having no fixed term. There are different contractual arrangements, in general dental practice, in the four countries of the UK.

In England and Wales, some practitioners provide NHS care through a different form of contract, known as “*Personal Dental Services*”. Typically, for example, NHS orthodontic care is provided by practitioners with these types of contracts, which have different terms and are time limited.

England and Wales

In England and Wales, patients are not formally registered with their dental practice and appointments are technically given on a first-come-first-served basis. Patients pay one of four fixed charges relating to the treatment received, rather than a proportion of the treatment cost. These charges are reviewed annually; in 2013, they ranged from £18.00 (€21.60) for routine treatments such as check-up, scale and polishing, to £214 (€257) for complex treatment, such as crown and bridgework.

The detail of the contract was in the process of being reviewed at the time of writing.

Further details are in the “Practice” section, later.

Scotland and Northern Ireland

The bulk of payments to the GDPs are by fees for items of treatment, but some continuing care and capitation fees, allowances and direct reimbursement of expenses also occur.

Most patients who receive dental treatment under the National Health Service (NHS) (Scotland) or the Health Service (HS) (Northern Ireland), are charged a percentage co-payment of a set ‘NHS/HS fee’ (80% in 2013); there is also a maximum charge payable in one course of treatment (about €445 in 2013).

In Scotland, the registration period for both adults and children treated under the NHS is “open-ended”, which means that patients are permanently registered until they go elsewhere. Continuing care and capitation payments are paid on a monthly basis for all patients registered with a dentist. Where a patient has not attended the dentist for three years or more and the dentist has not submitted a payment claim form (GP17) for the patient, the continuing care or capitation payment reduces to 20%.

In the HS in Northern Ireland adults and children are registered for twenty-four months. In both cases, the arrangement can ‘roll on’ for as long as both parties agree.

Across the UK

Specific groups may receive NHS dental care from a GDP without any patient charge, for example children under 18 years-old, pregnant or nursing mothers, individuals on welfare benefits, and those under 19 years old who are in full-time education. Some NHS treatments, which are often provided by GDPs, are free of charges for all patients, such as domiciliary care for the housebound and repairs to dentures.

NHS charges are typically lower than those that would be paid privately.

Access to an NHS GDP is, in principle, available to all. However, many dentists will not accept everyone who wants to receive and pay for treatment under NHS terms. A majority of dentists in the UK do have some commitment to the NHS, but an increasing number accept only private fee-paying patients. Dentists contracted to provide care under NHS terms will negotiate their commitment with the commissioning authority. They may provide as much or as little NHS care, and as much private care as they wish, subject to their individual NHS contract.

There is also a Salaried Primary Dental Care Service (SPDCS). This provides public health dentistry by salaried dentists for groups who have poor access to other dental services, for example children and adults with disabilities, and communities where there are few GDPs. They also provide dental public health and epidemiological support, for data collection.

Finally, dental care is also provided in most large general hospitals and all dental teaching hospitals. In the UK much specialist dental treatment is carried out within the Hospital Dental Service (HDS), usually after referral from a dentist in the general or community dental services. However, an increasing amount of specialist care is being provided in ‘high street’ practices, especially in oral surgery. Traditionally, the bulk of orthodontic care has been undertaken in general dental practices.

All dental services provided by hospitals and many services provided by the SPDCS are free.

All four services - the GDS, SPDCS, PDS and HDS are planned and coordinated at regional and local geographical level by health authorities and public “trusts”. The services are purchased by the health authority from local healthcare providers usually under service contracts.

The level of NHS income for dentists working in the system is set by the government, with advice from a quasi-independent committee, the Doctors’ and Dentists’ Review Body (DDRB). Newly qualified dentists work as salaried Vocational GDPs (‘Foundation Dentists’), and are salaried at national rates. Traditionally, patients attended six-monthly for their routine re-examinations, but in 2013 fewer adults are now keeping to this timetable, because of improvements in oral health. Many now attend only annually.

Figures from the Health and Social Care Information Centre, published in September 2013, show that about 56% of the adult population visited a dentist in the two years to June 2013, and

just 70% of the child population in the same period. List sizes are typically around 2,000 patients.

	Year	Source
% GDP spent on oral health	0.50%	2007 CECCDO
% of OH expenditure private	55%	2012 BDA

Private care

Most GDPs will provide some private care – either in a fully private contract with their patients, or by providing individual items of private treatment during a course of NHS care – known as “mixing”. This is permissible provided the patient has given fully informed consent.

If a patient is not on an insurance plan, private treatment is usually charged to the patient by way of fees, which will be individually set by the dentist, who must publish a list of fees, or his/her hourly rate.

Most specialist dental care is provided outside the NHS, in private practice, although there is some limited specialist care provided within the NHS – either in publicly run clinics and hospitals, or by general practitioners with contracts with the NHS.

Private insurance plans

In the UK, only a small proportion of people use private care plans or insurance schemes to pay for the cost of dental care. This can either be a separate policy or an extra to general medical cover.

Most private schemes are personal schemes, where individuals insure themselves by paying premiums directly to the company. The largest scheme (*Denplan*) is a pre-payment plan where participating dentists receive capitation payments and bear the financial risk of treatments provided. During recent years general insurance companies have also begun to enter the market for dental care insurance.

Private care plans and insurance companies are self-regulating and set their own levels of fees. Generally the level of the premiums will be part of a standard scale for all members, but for personal care plans the company will usually only provide cover for those with good oral health.

The Quality of Care

The way in which standards of dental care are monitored depends on which service provides the care. NHS GDPs who receive payment through the NHS have their treatment statistics compared to national norms. In Scotland a Dental Reference Officer (DRO) may investigate the treatment of one or a number of patients in a practice where the results are outside normal limits.

Each practice and clinic must have a complaints procedure. Any patient complaint must first be made to the dentist. If it is not possible to resolve the complaint through the practice procedure then the matter may be referred to the health authority. In Scotland and Northern Ireland serious complaints are dealt with through an NHS/HS Disciplinary Committee. If they find a breach of regulations this may result in the dentist having to repeat the treatment, a withholding of fees, or removal from the list of dentists who may work in the NHS/HS. In England and Wales a dentist can be removed from

an NHS dental list if they do not provide care to a high enough standard.

In all UK countries, a dental professional may be referred to the General Dental Council (GDC), for professional conduct issues. The GDC may censure a dental professional or remove the right to practise. There is a right of appeal against both health authority and GDC decisions.

For treatment undertaken within the hospital or community service there is a health service complaints procedure.

For treatment delivered outside NHS regulations, a Dental Complaints Service was set up in 2006. The service works by providing advice to patients and dental professionals. It is an arms-length organisation of the GDC. The website is www.dentalcomplaints.org.uk.

It is also possible for patients to seek redress through litigation independently.

Health data

	Year	Source
DMFT at age 12	0.70	2011 WHO
DMFT zero at age 12	62%	2007 CECCDO
Edentulous at age 65	36%	2005 OECD

“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

Fluoridation

Approximately 6 million people in the UK receive water in which the fluoride content has been adjusted to the optimum level for dental health of around one part of fluoride per million parts of water, or that has a naturally occurring fluoride level of around this level. This means that around one in ten of the total population of the UK is currently receiving water with a fluoride level that is capable of providing protection against tooth decay.

In some areas people drink water containing what can be described as a ‘sub-optimal’ natural fluoride content of between 0.3 and 0.7 parts per million. This is thought to offer some protection against tooth decay but is below the level at which the optimal benefit is obtained.

In some areas (for example parts of Essex, Wiltshire and Norfolk) naturally occurring fluoride levels can vary substantially between places and over time and it is very difficult to quantify this accurately.

In many areas of the UK, local health authorities have arrangements with dental practices and clinics for the distribution of fluoride-containing toothpastes to children free of charge.

Dentists may also be contracted to provide fluoride varnishes to children, on a targeted basis, as part of their overall care.

Education, Training and Registration

Undergraduate Training

There are 16 UK dental schools, all part of medical faculties of state-funded universities. The newest school, in Aberdeen, Scotland, opened in September 2008.

Year of data:	2013
Number of schools	16
Student intake (approximate)	1,100
Number of graduates (2012)	1,052
Percentage female	56%

To enter most dental schools a student must normally have passed at least 3 "A-level" science subjects studied at high school and because of the competition for places these would normally all have to be at the highest pass level.

Universities set their own fees and students have to pay these fees, up to £9,000 per year (2013). Student loans are available for tuition fees. In Scotland, Scottish students will not pay fees but they may claim a low-interest student loan from the state – which is repayable after graduation when earnings have passed a minimum threshold.

Many of the schools have expanded their intake in the last 10 years. All schools are public and there were no privately funded schools in 2013. For more information about numbers in each school, please see the final page of the UK section.

Quality assurance

The responsibility for quality assurance of the courses in the schools is undertaken by the General Dental Council, who conduct a regular programme of visits to dental schools to check the content and quality of training in the undergraduate dentist and dental care professionals' courses.

Qualification and Vocational Training

Primary dental qualification

All the universities award a degree, Bachelor of Dental Surgery (BDS or BChD), upon graduation, although until the late 1960s most offered a diploma of Licentiate in Dental Surgery (LDS) as an alternative. LDS diplomas were re-introduced in 2010, although they are no longer available as a stand-alone dental qualification. They are now mostly an option for non-EEA qualified dentists to obtain a UK qualification.

Vocational Training (VT) and Dental Foundation Training (DFT)

VT and DFT are post-qualification. Dentists may practise outside the NHS system without undertaking VT/DFT, but competition for dental jobs both within and outwith the NHS is high at the time of writing.

In order to practise in the NHS in the UK a dentist must normally complete a period of supervised vocational training, in a practice or public health clinic. GDP and Community DFT are based on clinical practice for 4 days a week and day release courses for one day a week. A certificate of completion of the training must be obtained before independent, unsupervised NHS practice is possible.

EU nationals who have graduated from an EU dental school are exempt from the VT/DFT requirement, although they may undertake this if they wish. Graduates from outside the EU are required either to undertake VT/DFT or, if they have substantial experience in general dental practice, to undergo 'competency training' (formerly called equivalence training). In England and Wales, the process works by arrangement with an employing practice, an NHS England Area Team, and the dental section of the Local Training and Education Board (previously the regional postgraduate dental deanery). The dentist is given a set amount of time to work through a set of competencies, with the help and support of the practice owner. Only after completion of VT/DFT or competency training are dentists able to be included in the "performer" list without conditions and thus allowed to treat NHS patients in practice.

In Scotland and Northern Ireland, dentists from outside the EU can be employed as assistants while being included in a supplementary list and working under a main list number of the practice 'contractor' in Scotland or 'principal' in Northern Ireland, and after a set period of time (usually one year full-time or equivalent part-time) are able to show their equivalence and be included in a main list.

Registration

All dentists who wish to practise dentistry in the United Kingdom have to be registered with the General Dental Council (GDC). The GDC is the 'competent authority' and maintains the register of dentists, the dental care professionals register, and the specialist lists.

Cost of registration (2013)	€ 685
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To register as a dentist in the UK, a qualified practitioner must present evidence of their recognised first qualification in an EU/EEA dental school, a certificate of current professional status from their current registering body (if qualification was outside the UK), a passport and a statement attesting to their good health.

EU nationals with non-EU degrees have the option of GDC assessment, in which their qualifications, skills, knowledge and experience are compared to that of a UK dentist at graduation. If the GDC feels that there is a lack in any area of this assessment of the candidate's equivalence, he/she may be asked to undergo additional training. In most cases, dentists in this situation will be required to sit the Overseas Registration Examination (ORE).

Language requirements

EU nationals are not required to pass an English test at registration level.

However, the GDC's Standards document (ethical code) issued in September 2013 makes it a requirement that a dental professional "must be sufficiently fluent in written and spoken English to communicate effectively with patients, their relatives, the dental team and other healthcare professionals in the UK".



For working in NHS general dental practice (see below), there is a requirement to pass an English language test (the IELTS or one of a list of other qualifications), at a set standard,

Non-EU nationals are generally required to acquire IELTS and then pass the GDC's Overseas Registration Examination (ORE) before they can register.

Further Postgraduate and Specialist Training

Continuing education

All dentists (including specialists and non-practising dentists) must participate in continuing education, of 250 hours in five years. This requirement is subdivided into 75 hours *verifiable* postgraduate education and 175 hours of *general* (informal) postgraduate education. Verifiable activity would include participation in courses, interactive distance learning, clinical audit, peer review – all of which must have defined learning objectives and outcomes. Since 2007 certain core subjects must be included in the verifiable activity – including radiation and infection control. Dentists must keep a record of their activity and certify compliance annually. Dental care professionals also must undertake CPD with different hourly requirements. The scheme is administered by the GDC and was under review in 2013. It is expected that the required number of hours will change and that the requirement for core subjects will be discontinued. Instead, requirements for annual CPD declarations and formal personal development plans for every registrant are likely to be introduced.

There are two schools of postgraduate dentistry (London and Edinburgh) and also postgraduate institutes attached to many undergraduate schools. Continuing education can also be provided by professional associations and independent organisations.

Specialist Training

The training for all specialties takes place in recognised hospital training posts, is supervised by the Medical Royal Colleges and lasts from 3 to 5 years, following a minimum period of two years of postgraduate training (which includes the year of VT/DFT). So, depending upon the specialty, it may take 5 to 7 years post-graduation to become a recognised specialist.

The GDC administers lists of registered dentists who meet certain conditions and have been given the right by the GDC to use a specialist title. Two dental specialties, Oral Surgery and Orthodontics, are recognised by the EU but UK law allows the GDC to recognise any specialty where this would be justified in the interests of the public and the dental profession. The lists indicate the registered dentists who are entitled to use a specialist title, but do not restrict the right of any registered dentist to practise in any particular field of dentistry or the right of any specialist to practise in other fields of dentistry.

In the UK the following dental specialties are recognised in 2014:

- ✚ Oral Surgery
- ✚ Endodontics
- ✚ Orthodontics
- ✚ Periodontics
- ✚ Restorative dentistry
- ✚ Prosthodontics
- ✚ Dental Public Health
- ✚ Oral Medicine
- ✚ Paediatric dentistry
- ✚ Oral Microbiology
- ✚ Oral Pathology
- ✚ Dental and Maxillofacial Radiology
- ✚ Special Care Dentistry

There are a number of degrees and diplomas associated with specialist qualifications, and these may be awarded by universities (such as Masters' degrees and Doctorates) and the Royal Colleges (such as Memberships and Fellowships).

Workforce

Dentists

The well-publicised shortage of dentists in the UK has been alleviated over recent years to a large extent, although there may still be pockets in rural areas where more dentists are needed. Competition is rising for jobs in dentistry in many areas, and a workforce review was ongoing in 2013.

Year of data:	2014
Total Registered	38,934
In active practice*	33,000
Dentist to population ratio**	1,936
Percentage female	45%
Qualified overseas***	10,273

* estimated

** active dentists only

*** 2013 data

The above numbers include those in the islands of the UK, shown at the end of this section.

In April 2013 a new statutory body, Health Education England (HEE) took on the responsibility for workforce planning and funding appropriate training in England. Local Education and Training Boards (LETBs) are reporting directly to this organisation and are including the function of the former postgraduate dental deaneries.

Non-active dentists will include those who are retired but remain on the Dentists Register, those who undertake full-time administrative work and other similar activities.

Newly qualified dentists are required to undertake vocational training/dental foundation training in the NHS before they can work unsupervised (in the NHS). Competition for training places is high.

There were anecdotal reports of unemployment in 2013, amongst (especially) newly qualified dentists who had failed to obtain VT/FD places. Underemployment, in particular of young dentists, is also increasing.

Movement of dentists into and out of the UK

UK qualified	29,136
Irish (primary qualification)	747
Other EU/EEA qualified	5,868
Non-EU: Qualified by examination	2,531
Qualified others	1,874

There has been a net inflow of dentist into the UK during the early part of this century – particularly from dentists moving to the UK from the new EU countries since 2004. Most of those described above as “Qualified others” are dentists who trained in South Africa and Australia, whose qualifications were formerly recognised by the UK for registration and who have maintained their registration since this ruling was abandoned.

Specialists

Year of data:	2014
Orthodontics	1,338
Endodontics	255
Paediatric Dentistry	236
Periodontics	334
Prosthodontics	421
Restorative Dentistry	308
Dental Maxillo-facial Radiology	24
Oral Surgery	728
OMFS*	
Dental Public Health	114
Oral Medicine	69
Oral and Maxillofacial Path	31
Oral Microbiology	7
Special Care Dentistry	314

* OMFS is medical speciality


Some Specialists are known as Consultants and work in hospitals. However, Consultants in Dental Public Health are employed by a central body called Public Health England and other health authorities, and a few work in teaching hospitals, which are part of the universities.

Many specialists now work in general practice, where they may restrict their services to their specialty – but may also undertake general dentistry, if they wish. However, when practising as a specialist it is usual to receive patients only by referral from general dental practitioners, or from other specialists. Most orthodontists now work out of hospital for part or all of their time – with hospital practice being increasingly reserved for exceptionally complex cases, including those needing surgical intervention.

There are many associations and societies for specialists.

Auxiliaries (Dental Care Professionals)

In the UK, dental auxiliaries are known as Dental Care Professionals (DCPs). Other than dental nurses (chairside assistants), there are five types of dental auxiliary:

-  Dental Hygienists
-  Dental Therapists
-  Orthodontic Therapists
-  Dental Technicians
-  Clinical Dental Technicians

All DCPs have to be registered with the General Dental Council (or in a formal training programme). They are required to comply with the strict ethical guidance, as laid down by the GDC, including awareness of all regulations pertaining to the practice of dentistry. They have to undertake continuing professional development – DCPs must complete, and keep records of, at least 150 hours of CPD over five years. A minimum of 50 of these hours must be verifiable CPD. To be verifiable CPD, the activity must have concise educational aims and objectives, clear anticipated outcomes, quality controls and documentary proof of attendance/participation from an

appropriate third party. The CPD system was under review in 2014.

Year of data: 2014			
	Male	Female	Total
Hygienists	224	6,150	6,374
Technicians	6,283	1,373	6,323
Clinical Dental Technicians	233	18	251
Dental Nurses	599	50,110	50,709
Therapists	113	2,144	2,257
Orthodontic Therapists	8	345	353
Other	3		3
Total number of DCPs	7,463	60,140	66,270
Actual no of DCPs	5,771	57,297	63,068

Note: some DCPs are registered with more than one title, so the total is less than the sum of the individual numbers. Also, these numbers include those in the islands of the UK, shown at the end of this section

There is some illegal dental practice by non-registered persons, who are routinely prosecuted in the courts upon the instigation of the GDC.

Dental Hygienists

Dental hygienist training is usually for 24 or 27 months at dental hygiene school, normally in dental schools alongside dental students. To enter hygiene school a student usually needs to be a qualified dental nurse and may be required to have an "A-level". Upon qualification a diploma is awarded. Some schools, such as Dundee, have now extended the course to 3 years and a degree is awarded.

Until April 2013, dental hygienists could only work under the direction of a dentist, who prepared the treatment plan, but need not be on the premises during treatment. Then the GDC amended their rules such that hygienists can now provide treatments within their scope of practice directly to patients, without a prescription. This is called 'direct access'. From the outset some practices started using direct access arrangements, while others continue to offer hygiene services only on prescription of a dentist. Direct access can currently only be provided in a private setting, not on the NHS. A hygienist's scope of practice includes:

- provide dental hygiene care to a wide range of patients obtain a detailed dental history from
- patients and evaluate their medical history
- carry out a clinical examination within their competence
- complete periodontal examination and charting and use indices to screen and monitor periodontal disease
- diagnose and treatment plan within their competence
- prescribe radiographs
- take, process and interpret various film views used in general dental practice
- plan the delivery of care for patients
- give appropriate patient advice
- provide preventive oral care to patients and liaise with dentists over the treatment of caries, periodontal disease and tooth wear undertake supragingival and subgingival scaling and root surface debridement
- using manual and powered instruments use appropriate anti-microbial therapy to manage plaque related diseases
- adjust restored surfaces in relation to periodontal treatment
- apply topical treatments and fissure sealants

- give patients advice on how to stop smoking
- take intra and extra-oral photographs
- give infiltration and inferior dental block analgesia
- place temporary dressings and re-cement crowns with temporary cement
- place rubber dam
- take impressions
- care of implants and treatment of peri-implant tissues
- identify anatomical features, recognise abnormalities and interpret common
- pathology: carry out oral cancer screening
- if necessary, refer patients to other healthcare professionals
- keep full, accurate and contemporaneous patient records
- if working on prescription, vary the detail
- but not the direction of the prescription according to patient needs

Additional skills which a dental hygienist might develop during their career:

- tooth whitening to the prescription of a dentist
- administering inhalation sedation
- removing sutures after the wound has been checked by a dentist

Dental hygienists do not:

- restore teeth
- carry out pulp treatments
- adjust unrestored surfaces or extract teeth

Hygienists would normally be salaried when working in hospitals and clinics, but would be paid per hour or even as a share of fees earned in general practice. Earnings for a full-time hygienist are dependent on the type of working environment, general practice offering higher sums. Some hygienists own dental practices, in which they employ one or more dentists.

Dental Therapists

Most dental therapists undertake a degree qualification. They often also train as hygienists at the same time. Qualified hygienists can attend a specific training programme to become dental therapists.

Dental therapists have a wider scope than hygienists. The permission to provide services directly to the public applies to them for their full scope of practice. Their type and amount of earnings is similar to hygienists.

Dental therapy covers the same areas as dental hygiene, but dental therapists also:

- carry out direct restorations on permanent and primary teeth
- carry out pulpotomies on primary teeth
- extract primary teeth
- place pre-formed crowns on primary teeth

Additional skills which dental therapists could develop during their careers:

- administering inhalational sedation
- varying the detail of a prescription but not the direction of a prescription
- prescribing radiographs
- tooth whitening to the prescription of a dentist
- suture removal after the wound has been checked by a dentist

Therapists are able to work in any sphere of practice.

Orthodontic Therapists

This is a new class of DCP and the first 10 registered in August 2008.

The training, which is a minimum of a year and leads to a diploma, is being offered by eight universities and training providers – Bristol, Cardiff, Edinburgh, Glasgow, Leeds, Manchester, Preston and Warwick. Entry on to the course is open to qualified dental nurses, hygienists and therapists and dental technicians with appropriate clinical experience.

An orthodontic therapist can deliver a range of treatments within the scope of their role:

- clean and prepare tooth surfaces ready for orthodontic treatment
- identify, select, use and maintain appropriate instruments
- insert passive removable orthodontic appliances
- insert removable appliances activated or adjusted by a dentist
- remove fixed appliances, orthodontic adhesives and cement
- identify, select, prepare and place auxiliaries
- take impressions
- pour, cast and trim study models
- make a patient's orthodontic appliance safe in the absence of a dentist
- fit orthodontic headgear
- fit orthodontic facebows which have been adjusted by a dentist
- take occlusal records including orthognathic facebow readings
- take intra and extra-oral photographs
- place brackets and bands
- prepare, insert, adjust and remove archwires previously prescribed or, where necessary, activated by a dentist
- give advice on appliance care and oral health instruction
- fit tooth separators
- fit bonded retainers
- carry out Index of Orthodontic Treatment Need (IOTN) screening either under the direction of a dentist or direct to patients
- make appropriate referrals to other healthcare professionals
- keep full, accurate and contemporaneous patient records
- give appropriate patient advice

Additional skills which orthodontic therapists could develop during their career:

- applying fluoride varnish to the prescription of a dentist
- repairing the acrylic component part of orthodontic appliances
- measuring and recording plaque indices
- removing sutures after the wound has been checked by a dentist.

Orthodontic therapists do not:

- modify prescribed archwires
- give local analgesia
- remove sub-gingival deposits
- re-cement crowns
- place temporary dressings
- diagnose disease
- treatment plan

They cannot diagnose disease, treatment plan or activate orthodontic wires, as these areas are reserved to dentists.

Dental Technicians

Training as a dental technician is provided by 11 Universities and Colleges, leading to a diploma/certificate (BTEC - Business and Technician Education Councils, Scotvec in Scotland) or degree (Birmingham, Liverpool, London and Nottingham colleges offer a Foundation Degree Dental Technology programme). Basic training would normally be 4 years, with an additional up to 2 years for more specialised work.

They must be qualified to register with the GDC, which they must do before they can work independently. Their type and amount of earnings is unknown. Dental Technicians are permitted to produce dental technical work to the prescription of the dentist or clinical dental technician.. They may:

- review cases coming into the laboratory to decide how they should be progressed
- work with the dentist or clinical dental technician on treatment planning and outline design
- give appropriate patient advice
- design, plan and make a range of custom-made dental devices according to a prescription
- modify dental devices including dentures, orthodontic appliances, crowns and bridges according to a prescription
- carry out shade taking
- carry out infection prevention and control procedures to prevent physical, chemical and microbiological contamination in the laboratory
- keep full and accurate laboratory records
- verify and take responsibility for the quality and safety of devices leaving a laboratory
- make appropriate referrals to other healthcare professionals

Additional skills which dental technicians could develop during their careers:

- Working with a dentist in the clinic,
- assisting with treatment by helping to fit attachments at chairside.
- Working with a dentist or a clinical dental technician in the clinic, assisting with treatment by:
 - taking impressions
 - recording facebows
 - carrying out intra-oral and extra-oral tracing
 - carrying out implant frame assessments
 - recording occlusal registrations
 - tracing cephalographs
 - carrying out intra-oral scanning for CAD/CAM
 - taking intra and extra-oral photographs

Dental technicians do not:

- work independently in the clinic
- perform clinical procedures related to providing removable dental appliances
- undertake independent clinical examinations
- identify abnormal oral mucosa and related underlying structures
- fit removable appliances

They are permitted to undertake denture repairs directly for the public, provided that they do not need to work in the oral cavity. Historically, they worked in a laboratory alongside dental practices, as employees of dentists, but most now work in commercial dental laboratories which charge fees to dentists, health authorities. Some work as salaried employees in hospitals.

Clinical Dental Technicians (CDTs)

Until 2008 there were no courses available within the UK to achieve this qualification. Training courses are available (in 2013) in Edinburgh, Preston and Kent Postgraduate Deanery. The course by the George Brown City College in Canada matches the requirements of the GDC's curriculum but is not recognised, in full, as a registerable qualification, as it is awarded from outside the EU.

Clinical dental technicians specialise in the manufacture and fitting of removable dental appliances directly to patients. The main type of work they undertake is in the provision of dentures. They are able to provide complete dentures to edentulous patients independently of other members of the dental team. Currently, they can provide partial dentures as long as the patient has been seen by a dentist who has issued a certificate of oral health and a treatment plan. So, they may:

- prescribe and provide complete dentures direct to patients
- provide and fit other dental devices on prescription from a dentist
- take detailed dental history and relevant medical history
- perform technical and clinical procedures related to providing removable dental appliances
- carry out clinical examinations within their scope of practice
- take and process radiographs and other images related to providing removable dental appliances
- distinguish between normal and abnormal consequences of ageing
- give appropriate patient advice
- recognise abnormal oral mucosa and related underlying structures and refer patients to other healthcare professionals if necessary
- fit removable appliances
- provide sports mouth guards
- keep full, accurate and contemporaneous patient records vary the detail but not the direction of a prescription according to patient needs

Additional skills which a CDT could develop during their career:

- oral health education
- re-cementing crowns with temporary cement
- providing anti-snoring devices on prescription of a dentist
- removing sutures after the wound has been checked by a dentist
- prescribing radiographs
- replacing implant abutments for removable dental appliances on prescription from a dentist
- providing tooth whitening treatments on prescription from a dentist

They must be qualified to register with the GDC, which they must do before they can work. Their type of earnings is unknown and they are subject to the same disciplinary procedures as other DCPs.

Dental Nurses

Dental nurses work at the chairside to assist dentists. In the UK they are usually responsible for infection control and are often called upon to write patient records.

Education and training will often be undertaken informally initially by the employing dentist, but there is an extensive range of educational establishment which offer off-site education, in colleges and schools, typically as "day-release" for one day a week, or as evening courses, which the trainee dental nurse must undertake.

There are established qualifications, following a final examination, under an Examination Board (www.nebdn.org), or as vocational qualifications (NVQ and SVQ) accepted by a national accrediting body. Qualified dental nurses must register with the GDC to enable them to work with dentists and they are

subject to the same continuing education requirements and disciplinary procedures as other DCPs. Their duties include:

- prepare and maintain the clinical environment, including the equipment
- carry out infection prevention and control procedures to prevent physical, chemical and microbiological contamination in the surgery or laboratory
- record dental charting and oral tissue assessment carried out by other registrants
- prepare, mix and handle dental bio-materials
- provide chairside support to the operator during treatment
- keep full, accurate and contemporaneous patient records
- prepare equipment, materials and patients for dental radiography; process dental radiographs
- monitor, support and reassure patients
- give appropriate patient advice
- support the patient and their colleagues if there is a medical emergency
- make appropriate referrals to other health professionals

Additional skills which DNs could develop during their careers:

- further skills in oral health education and oral health promotion
- assisting in the treatment of patients who are under conscious sedation
- further skills in assisting in the treatment of patients with special needs
- further skills in assisting in the treatment of orthodontic patients
- intra and extra-oral photography
- pouring, casting and trimming study models
- shade taking
- tracing cephalographs

Additional skills under prescription or direction from another registrant:

- taking radiographs
- placing rubber dam
- measuring and recording plaque indices
- removing sutures after the wound has been checked by a dentist
- constructing occlusal registration rims and special trays
- repairing the acrylic component of removable appliances
- applying topical anaesthetic to the prescription of a dentist
- constructing mouthguards and bleaching trays to the prescription of a dentist
- constructing vacuum formed retainers to the prescription of a dentist
- taking impressions to the prescription of a dentist or a CDT.

Dental nurses do not diagnose disease or treatment plan. All other skills are reserved to one or more of the other registrant groups. Since 2013, they have been able to participate in public health programmes without patients seeing a dentist first.

Dental Receptionists and Practice Managers

It is usual for dental practices to have one or more dental receptionists, who manage appointments for patients and other front desk administrative work. Often the receptionists are dental nurses, who can also assist inside the clinical areas at times of shortage of the regular dental nurses.

Many practices also have practice managers, who handle the "backroom" affairs of the practice, which might include personnel matters, equipment maintenance and dental supply ordering, amongst many other duties. They are often recruited from outside dentistry.

Neither receptionists nor practice managers need be qualified, or registered with the GDC. They have their own professional association. It is estimated that there may be more than 15,000 receptionists and practice managers (in 2014).

Practice in the United Kingdom

Year of data:	2013
General (private) practice*	31,615
Public dental service	1,800
University	566
Hospital	2,084
Armed Forces	244
Administrative	250
General Practice as a proportion is	92%
Number of general practices*	12,000

*estimated

Working in General Practice

In the UK dentists who practise on their own or as small groups, outside hospitals or schools, and who provide a broad range of general treatments are said to be in *General Practice*. It is estimated that there are about 11,000 practices in the UK (2013). All must be registered with the Care Quality Commission in England or equivalent organisations in the other countries (see below). Practitioners work without another dentist in the same practice in about one fifth of practices. However, most practices have two or more dentists working together and with dental hygienists and/or dental therapists.

Some practices are owned and run by clinical dental technicians, to provide dental prostheses to patients. However, these practices are not able to obtain contracts to provide NHS care. Clinical dental technicians must work to the prescription of a dentist unless they are providing full sets of dentures to edentulous patients. All dental care professionals are permitted to own and run dental practices, but most are not (in 2013) able to contract with the NHS.

Most dentists in general practice are self-employed and earn their living partly through charging fees for treatments and partly by claiming payments from the government. A growing number of dentists in general practice accept only private fee-paying patients, but this was still thought to be less than 20% of all GDPs in 2013.

NHS Practice (General Dental Services)

To be able to work in unsupervised practice in the NHS all dentists need to demonstrate that they understand English. Those qualified in the EU have to undertake an examination (IELTS or equivalent) and receive a certificate which indicates that they have achieved a score of at least "6" in each of the four, separate modules (listening, speaking, academic reading and academic writing).

Also, there are requirements to bring a police check showing that they have had no criminal convictions *anywhere in the world* which has led to a prison sentence of more than 6 months. Two clinical references must be obtained.

England and Wales

The general practice system for payments to dentists is based on a fixed annual sum (a Contract Value) being paid to each practice (to a "provider"), divided into 12 equal monthly payments. This sum is to cover all expenses connected with the delivery of oral healthcare to patients and the income of all the dentists ("performers") and dental care professionals and other staff in the practice. Associated with this is a "target" of activity (Units of Dental Activity or UDAs) which the practice has to produce in the year. Failure to achieve the target may lead to a clawback of funds paid and a reduced contract value the following year.

For practices which were open on April 1st 2006 and were offered a contract, the Contract Value was based on their activity in the 12 months from October 1st 2004 to September 30th 2005 – uprated by inflation. The number of UDAs was supposed to be based on an analysis of their activity during the same period, but many dentists believe that the figures produced were flawed.

Other payments may be made as direct allowances, especially for additional services that are not included in the normal Contract Value (such a sedation services).

The contract system was under review in 2013.

Scotland and Northern Ireland

There is a prescribed NHS fee scale with defined contributions from the government and the patient. Prior approval for treatment, from a central authority (the Practitioner Services Division (Dental) or Business Services Organisation, respectively), is required for complex treatment which costs more than €405/€325 respectively (2013).

In addition there are allowances paid to GDPs/practices to recognise and reward their level of health service commitment.

Private Practice (The United Kingdom)

For private patients who pay the whole cost of care themselves, there is no restriction upon the fees charged. Private insurance schemes are described earlier. BDA figures (in 2013) show that an increasing number of dentists are increasing the proportion of their practices to provide private-only care, independent of the NHS.

Joining or establishing any practice

There are no stated regulations which specifically aim to control the location of dental practices. A dental practice which does not intend to work within the NHS may be opened anywhere, subject to local planning laws.

Before opening a practice in England, the prospective provider of dental services must register with the Care Quality Commission (CQC), a quasi-autonomous government body. Certain conditions must be fulfilled and the practice inspected before it opens for patients. It will then be inspected regularly, at least once every 3 years. The CQC has the power to close down a practice, if it considers it to be unsafe and a risk to the public.

Similar organisations exist in the other countries of the UK: Health Inspectorate Wales, Health Improvement Scotland (not operational at the time of writing), and the Regulation and Quality Improvement Authority in Northern Ireland. All organisations have similar, but slightly different objectives to those of the Care Quality Commission.

In Scotland there are incentive schemes to persuade dentists to open practices in certain areas. Some individual dentist's allowances may also not be available depending on the area.

There are no specific contractual requirements between practitioners working in the same practice. Draft contracts are available from the BDA and other similar organisations and form the basis for such arrangements. This is particularly important as most of these arrangements are on a self-employed basis, which provides for no or very limited employment rights. A dentist's employees however are protected by the national and European laws on employment rights, equal employment opportunities, maternity benefits, occupational health, minimum vacations and health and safety.

For sedation services, and for a new practice, the local health authority has the right to inspect the premises first (before opening) to ensure compliance with health and safety regulations. Any type of building may be used which fulfils the legislative claims to dental practice. There are also 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. There is little state assistance for establishing a new practice, so dentists usually negotiate commercial loans from a bank.

Dentists starting in practice usually work for a general practitioner as an associate, provided they have completed VT/DFT, if they are working in the GDS. They then either buy into that practice or purchase their own. Traditionally, dental practices were opened in converted private homes and above shops, but increasingly practices can now be found in ground floor, modern-fronted "high street" shops, shopping malls and purpose built clinics.

Dental practices may only be owned by GDC registrants (but see Corporate Dentistry). However, widows or widowers may continue to own a dental practice for up to three years after their spouse's death.

To participate in NHS general practice a dentist must also have evidence of indemnity insurance, and a practice address, when they apply to the local health authority to be included in their list of dentists.

NHS General Dental Practitioners see on average about 160 patients a week and have about 2,500 patients on their NHS "list". Typically they also have a few fully private patients.

A GDP who is fully private would see about 100 patients a week.

Working in the Public Clinics

The public dental service is known as the Salaried Primary Dental Care Service and mostly provides care for children, domiciliary care, treatment for people with disabilities and for those who have problems receiving dental care from another source. The service employs dentists as *clinical dental officers*, *senior dental officers* or *dental service managers* and the size is

reducing. Working in the community service requires no formal postgraduate training but promotion is usually given to those who have additional qualifications. A high proportion dentists working in the community dental service are female.

Some public health dentistry is being offered through the Personal Dental Services (see above), where access to NHS dentistry is perceived by the health authorities to be problematic.

The monitoring of dentists in the public dental service is usually within guidelines prescribed by the health authority. All dental staff are required to participate in clinical audit. The complaints procedures are the same as those for dentists working in other settings, as already described.

Working in Hospitals

Dentists who work in hospitals are salaried employees of NHS Trusts. Hospital dentists may treat patients outside the hospital with the agreement of their employer, if they work part-time and there are no earnings restrictions.

Dentists work as hospital consultants, associate specialists or in staff grade positions. There are career grade posts and there are also junior training grade posts. In order to be promoted to a consultant it is necessary to follow a formal specialist training pathway, as described above. To be offered a post in maxillo-facial surgery normally requires a medical qualification in addition to any dental qualification.

Dentists in the service are monitored through clinical audit and by the Faculties of the Royal Surgical Colleges. All hospital dentists are required to participate in clinical audit.

Working in Universities and Dental Faculties

Again, the dentists who work in university dental faculties are employees.

The main academic title within a UK dental faculty is that of university professor, supported by senior lecturer and lecturer. Dental academics in the UK hold an academic title but also an honorary hospital title. For promotion a dentist must undergo clinical specialist training as well as academic training usually by obtaining a PhD, or Master's degree and publishing their work. There are no other regulations or restrictions on the promotion of dentists within faculties. Academic dentists spend approximately 60% of their time on clinical duties and the remainder on teaching, research and administration.

Working in the Armed Forces

About a third of the full-time dentists in the Armed Forces are female. Number of dentists in 2013:

Army	142
Royal Air Force	54
Royal Navy	48

Professional Matters

Professional association

The main dental organisation for dentists in the UK is the *British Dental Association* (or *BDA*).

	Number	Year	Source
British Dental Association	19,736	2012	FDI

About 50% of dentists (57% of active dentists) are members of the BDA. As well as being a professional association it is also the trade union for dentists, being responsible for negotiations with the four UK governments on terms and conditions of service for dentists working in the NHS. It is also a scientific society. There are four professional branches each headed by a central committee, for General Dental Practice, Hospital Dental Services, Community and Public Dental Services and Clinical Academic Staff. The BDA also has an extensive structure of regional branches and local sections.

There are also some other, smaller general practitioner associations and scientific interest groupings (besides the specialist societies).

Ethics and Regulation

Ethical Code

Guidance on most aspects of professional behaviour is contained in a Standards document produced by the registration body, the *General Dental Council* (GDC). As mentioned earlier, the latest document was introduced in September 2013 and is mandatory for dental professionals to follow. It includes information about what is expected in relation to professional standards, patient expectations, overarching principles of professionalism and has detailed guidance on individual situations in some aspects. The overarching principles are:

- Put patients' interests first
- Communicate effectively with patients
- Obtain valid consent
- Maintain and protect patients' information
- Have a clear and effective complaints procedure
- Work with colleagues in a way that is in patients' best interests
- Maintain, develop and work within your professional knowledge and skills
- Raise concerns if patients are at risk
- Make sure your personal behaviour maintains patients' confidence in you and the dental profession

This code is administered by the GDC. Guidance and advice on relationships and behaviour between dentists, and between dentists and their staff, is provided by the BDA and the other associations.

Fitness to Practise/Disciplinary Matters

The GDC is the main disciplinary body for dentists in the UK, through a Fitness to Practise Panel (FTPP) of around 150

people (including dentists, DCPs and non-dentists) who form panels for Professional Conduct, Health Matters, Re-registration and Performance Review.

Hearings are conducted as a court of law, with (usually) lawyers conducting the case for the "prosecution" and "defence" and witnesses called. The panel is assisted by legal counsel. Upon the recommendation of a FTP panel a registrant whose fitness to practise has been deemed to be impaired might have sanctions placed upon them ranging from being admonished, put on restricted practise, suspended, or erased from the register and therefore lose the right to practise – depending upon the severity of the misdemeanour.

There is a right of appeal to the Courts.

Data Protection

The provisions of the various Data Protection Regulations are taken seriously in the UK and all dentists have to comply with these. Annual notification to the Information Commissioner (at €50 per year) is compulsory for all practising dentists who keep records on computer.

Advertising

A dentist may only use publicity or advertising material that is legal, decent, honest, truthful and has regard for professional propriety. They may advertise in newspapers, magazines, on the radio and TV. All advertisements and printed material must include the name of at least one dentist normally in attendance at the practice in question. Publicity or advertising material should not be of a character which could bring the profession into disrepute. It should not make a claim that is misleading nor suggest superiority over any other dentist or practice and it should not contain any reference to the efficiency, skills or knowledge of any other dentist or practice.

Dentists may use websites to publicise their practices and the BDA has advised its members about the need to follow the guidelines set out by the CED, following the enactment of the Directive on Electronic Commerce in 2001. The General Dental Council has published guidance about advertising as part of its standards documents.

Indemnity Insurance

Liability insurance is compulsory for all dentists working in the NHS, and will become a legal requirement of GDC registration in due course, as a result of the EU cross-border directive provisions. It is already a requirement under the GDC standards. Professional indemnity or insurance is provided by *Dental Protection Ltd*, the *Dental Defence Union*, and the *Medical and Dental Defence Union of Scotland* and some commercial companies. They provide cover for advice, legal costs and virtually unlimited indemnity. There are different prices for different types of dentists, but a full-time general dental practitioner pays approximately €2,330 annually. Prices are determined on an individual level.).

The indemnity may cover the dentist for working overseas.

Corporate Dentistry

Until 2006, only dentists were able to own dental practices. Since then, all GDC registrants can own practices and can also incorporate. Some are owned by external commercial organisations (*bodies corporate*). There are several large chains of bodies corporate, which trade on the stock market. In 2010, the corporate dentistry market had an estimated 800 dental practices with 3,100 dentists, or 10.5% of all primary care dentists. Many dentists in group practices have found it financially advantageous to incorporate and occasionally dental care professionals who own practices have done the same.

Nevertheless, in all cases the majority of directors currently must be dentists or dental care professionals.

Tooth whitening

The EU Cosmetics Directive (and the subsequent Cosmetics Regulation replacing it in July 2013) has been fully implemented in the UK, reflecting the requirements for products between 0.1 and 6% hydrogen peroxide to be only sold to dentists.

The GDC believes that tooth whitening is the practise of dentistry and regularly prosecutes non-registrants in the courts for illegal practice. A legal precedent for this was set in 2013.

Health and Safety at Work

Dentists and those who work for them must be inoculated against Hepatitis B and TB and be checked regularly for sero-conversion. The employer is required to pay for inoculation of the dental staff, although in some parts of the UK this is provided free of charge by the Occupational Health Services of the local health authorities.

Ionising Radiation

Dental practices are subject to the Ionising Radiation Regulations 1999 and the Ionising Radiation (Medical Exposure) Regulation 2000. Dentists and dental care professionals learn about ionising radiation as part of their initial training. Once in practice they must update their knowledge by undertaking further training in every subsequent 5-year period.

Only a fully trained person is permitted to take radiographs in a dental practice. Dentists are required undertake regular audits of the quality of their radiographs.

There are also rules about the practice establishment. Dental equipment has to be sited, used and maintained subject to local rules relevant to the particular practice layout. Certificates of compliance must be available and regular inspections carried out.

Hazardous waste

Clinical waste is considered "hazardous" under the Hazardous Waste (England and Wales) Regulations 2005. Similar regulations cover Scotland and Northern Ireland. Clinical waste has to be collected by a licensed company along with appropriate documentation including waste descriptions and the relevant waste codes. Clinical waste will either be incinerated or rendered safe before final disposal.

The regulations also mean that all waste dental amalgam is classified as hazardous waste and, as such, discharge to sewer is not allowed. To comply with the regulations dental practices (both existing and new) require amalgam separation units to be installed and ensure the amalgam collected is disposed of in accordance with the regulations.

Regulations for Health and Safety

For	Administered by
Ionising radiation	Health and Safety Executive at local level and national healthcare regulators such as the CQC
Electrical installations	Health and Safety Executive at local level
Waste disposal	Environment Agency at local level
Medical devices	Medicines and Healthcare products Regulatory Agency
Infection control	Local health authorities and national healthcare regulators such as the CQC

Financial Matters

Dentists who work in the NHS are usually members of the NHS superannuation scheme, a retirement pension scheme. The dentist contributes between 5% and 13.3% of net income (after practice expenses) and the NHS 14%, to produce a retirement fund (which is uprated each year, for inflation).

A change of rules means that there are two sections to the Scheme. At the normal retirement age of 60 or 65 (depending on which section of the scheme they are in) salaried members can take a pension based on 1/80th of the total pensionable pay for the 1995 section and 1/60th for the 2008 section. Practitioners benefits are calculated on their career averaged earnings. Members of the scheme can retire earlier than the normal retirement age on a reduced pension from age 50 if they joined the scheme before 1st April 2006 or age 55 if they joined after that date or are a member of the 2008 section. There is a similar but independent arrangement for University staff who are members of the University Superannuation Scheme.

Dentists working outside the NHS are responsible for their own pension and contribute to private pension schemes where the final payment is dependent upon the amount of money saved.

The normal retirement age in the UK is 65, although NHS general practitioners can carry on as practice owners until they are 75. Dentists in private practice have no fixed retirement age.

Taxes

Income Tax

There is a national income tax (dependent on salary), and a local council tax.

Using 2013 figures, an employed person or self-employed person working in the UK is allowed a basic personal allowance of £9,440 – this is the amount a person can earn during a tax year without having to pay any tax. Earned income above the personal allowance is taxed at the appropriate percentage rate:

Basic	£0 to £32,010	- 20%
Higher	£32,011 to £150,000	- 40%
Additional	over £150,000	- 45%

Self-employed workers pay Class 2 national insurance contributions (NICs), which are set at a flat rate of £2.70 per week. They also have to pay the following Class 4 NICs on the annual profit they make from their business: 9% between £7,755 and £41,450, and 2% on all profits above £41,450.

Employees pay Class 1 NIC at 12% on earnings above £149 and 2% on earnings above £797.

Value Added Tax

Generally, VAT must be applied if a business's annual sale of qualifying goods and services either has exceeded the VAT threshold of £79,000 or its taxable supplies are set to exceed £79,000 within the next 30 days.

VAT is charged at three different rates and goods and services are banded into these different categories. Most goods and services provided in the UK fall into the standard-rated category of 20% of the retail price but some goods can have a reduced rate of 5% or be zero rated.

Dentistry which is performed to restore, protect or maintain oral health is exempt from VAT.

Various Financial Comparators

London Zurich = 100	2003	2012
Prices (including rent)	111.4	66.0
Wage levels (net)	63.9	56.8
Domestic Purchasing Power at PPP	63.6	66.0

(Source: UBS August 2003 and November 2012)



Other Useful Information

<p>Main national association:</p> <p>British Dental Association 64 Wimpole Street London W1G 8YS UK Tel: +44 20 7563 4563 Fax: +44 20 7487 5232 E-mail: enquiries@bda.org Website: www.bda.org</p>	<p>Competent Authority and official information centre:</p> <p>General Dental Council 37 Wimpole Street London W1M 8DQ UK Tel: +44 20 7887 3800 Fax: +44 20 7224 3294 Email: Information@gdc-uk.org Website: www.gdc-uk.org</p>
<p>British Society for Dental Hygiene and Therapy</p> <p>Email: enquiries@bsdht.org.uk Website: www.bsdht.org.uk</p> <p>British Association of Dental Therapists</p> <p>Email: badtadmin@badt.org.uk Website: www.badt.org.uk</p> <p>The Clinical Dental Technicians' Association</p> <p>Email: info@cdta-online.co.uk Website: www.cdta.org.uk/</p>	<p>British Association of Dental Nurses</p> <p>Email: admin@badn.org.uk Website: www.badn.org.uk</p> <p>The Dental Technicians' Association</p> <p>Email: info@dta-uk.org Website: www.dta-uk.org</p>
<p>Publications:</p> <p>British Dental Journal Editorial Office 64 Wimpole Street London W1G 8YS UK Tel: +44 20 7535 5842 Fax: +44 20 7535 5843 Email: bdj@bda.org Website: www.bdj.co.uk</p>	<p>For advertising:</p> <p>BDJ Classified Advertising Department The Macmillan Building 4 Crinan Street London N1 9WX Tel: +44 20 7843 4729 Fax: +44 20 7843 4996 Email: bdj@nature.com Website: www.bdjjobs.co.uk</p>



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Email: student.recruitment@glasgow.ac.uk
Web: www.glasgow.ac.uk

Liverpool

The University of Liverpool The Foundation Building
Brownlow Hill
Liverpool
L69 7ZX
Tel: 0151 794 2000
Fax: 0151 708 6502
Email: ugrecruitment@liv.ac.uk
Web: www.liv.ac.uk

Queen Mary, University of London

Mile End Road
London
E1 4NS
Tel: 020 7882 5555
Fax: 020 7882 5500
Email: admissions@qmul.ac.uk
Web: www.qmul.ac.uk

Newcastle

Newcastle University
King's Gate
Newcastle upon Tyne
NE1 7RU
Tel: 0191 208 3333
Fax: 0191 222 6143
Web: www.ncl.ac.uk

Belfast

Queen's University Belfast
University Road
Belfast
BT7 1NN
Tel: 02890 973 838
Fax: 02890 975 151
Email: admissions@qub.ac.uk
Web: www.qub.ac.uk/Birmingham

Bristol

University of Bristol Undergraduate Admissions Office
Senate House
Tyndall Avenue
Bristol
BS8 1TH
Tel: 0117 928 9000
Fax: 0117 925 1424
Email: ug-admissions@bristol.ac.uk
Web: www.bristol.ac.uk

Dundee

University of Dundee
Dundee
DD1 4HN
Tel: 01382 383 838
Fax: 01382 388 150
Email: ContactUs@dundee.ac.uk
Web: www.dundee.ac.uk/admissions/undergraduate

Leeds

University of Leeds
The University of Leeds
Woodhouse Lane
Leeds
LS2 9JT
Tel: 0113 343 3999
Email: admissions@leeds.ac.uk
Web: www.leeds.ac.uk

King's College London (University of London)

Strand
London
WC2R 2LS
Tel: 020 7848 5454
Fax: 020 7848 7171
Email: prospective@kcl.ac.uk
Web: www.kcl.ac.uk

Manchester

The University of Manchester
Oxford Road Manchester M13 9PL
Tel: 0161 275 2077
Fax: 0161 275 2106
Email: admissions@manchester.ac.uk
Web: www.manchester.ac.uk

Plymouth

Peninsula College of Medicine & Dentistry
The John Bull Building Tamar Science Park Research
Way Plymouth
PL6 8BU
Tel: 01752 437 333
Fax: 01752 517 842
Email: pcmd-admissions@pcmd.ac.uk
Web: www.pcmd.ac.uk

<p>Preston University of Central Lancashire, Preston, Lancashire PR1 2HE Dentists graduating each year: Tel: 01772 201 201 Web: http://www.uclan.ac.uk/</p>	<p>Sheffield The University of Sheffield 9 Northumberland Road Sheffield S10 2TT Tel: 0114 222 8030 Fax: 0114 222 8032 Web: www.sheffield.ac.uk</p>
<p>Edinburgh (postgraduate only) The University of Edinburgh 4th Floor, Lauriston Building Lauriston Place Edinburgh EH3 9HA Tel: +44(0)131 536 4970 Fax: +44(0)131 536 4971 Email: epdi@ed.ac.uk Web: www.dentistry.ed.ac.uk/contact-us#sthash.M7QHfaw9.dpuf</p>	<p>London (postgraduate only) London Eastman (postgraduate only) Eastman Dental Hospital 256 Gray's Inn Road London WC1X 8LD Tel: 020 3456 1038 Web: http://www.ucl.ac.uk/eastman</p>

	Number of	
	Undergrads 2013	Graduates 2012
Aberdeen	73	13
Belfast	234	36
Birmingham	375	71
Bristol	371	72
Cardiff	365	74
Dundee	331	59
Glasgow	459	84
Leeds	447	91
Liverpool	324	64
London*	941	195
Manchester	390	71
Newcastle	436	88
Plymouth	235	68
Preston**		
Sheffield	407	79
	5,388	1,052

* 2 dental schools in one university

** included in Liverpool numbers

British Dependencies and Overseas Territory in Europe

There are three island jurisdictions in the UK, with their own parliaments and a very limited amount of self-government: the Isle of Man, Guernsey and Jersey.

All the islands are English speaking British Crown dependencies. Officially, they are not part of the UK. Their head of state is Queen Elizabeth II, who appoints a Lieutenant Governor for each of Jersey, Guernsey (and its dependent islands), and the Isle of Man.

Dentistry in all three Dependencies is regulated by the General Dental Council.

The Channel Islands

Year of data: 2014			
	Male	Female	Total
Dentists	107	59	166
Hygienists	0	31	31
Technicians	12	6	18
Clinical Dental Techs	2	1	3
Dental Nurses	0	174	174
Dental Therapists	0	3	3
Orthodontic Therapists	0	1	1

The Channel Islands represent the last remnants of the medieval Dukedom of Normandy, which held sway in both France and England. They are located in the English Channel, off the northwest coast of France. The two largest islands are Jersey and Guernsey, and there are a number of smaller islands. The islands follow English law but with local statute; justice is administered by the Royal Courts of Guernsey and Jersey. The islands of Guernsey, Alderney, Herm and Sark are normally referred to as "The Bailiwick of Guernsey".

Guernsey and Jersey have separate unicameral Assemblies.

Financial services - banking, fund management, insurance, etc. - account for about 55% of total income in the tiny Channel Islands economy. Tourism, manufacturing, and horticulture, mainly tomatoes and cut flowers, have declined on previous levels but now remain stable. Light taxes and no death duties make them popular offshore tax centres (taxes are relatively low and there is no VAT or GST levied on goods and services in Guernsey, however Jersey now has a 5% GST.).

The islands are not members of the European Union, but enjoy a relationship with the EU under the terms of Protocol 3 to the United Kingdom's 1972 Treaty of Accession. Briefly this gives the islands the benefit of access to the free trade area without the obligation to harmonise their laws and taxes. Specifically the islands are not bound by EU Directives on tax or any other matters. So, although the islands are within the EU's customs territory, EU competition rules do not apply to them, except so far as is necessary to permit the United Kingdom, of which they are dependencies, to observe its obligations under the 1972 Treaty of Accession. Channel Islanders do not benefit from the EU rules on the free movement of persons and services within the Union, but EU natural and legal persons enjoy "equal treatment" under EU law.

There are no dental schools in the Channel Islands, and registration as a dentist is with the Health and Social Services Department (Guernsey) and the UK General Dental Council (both), whose ethical rules must be followed.

Guernsey

Guernsey has a land area of 78 sq km and a population of 65,605 (July 2013). Its capital is St Peter Port. The GDP was €70,400 PPP per capita in 2011 (latest figures) and the currency used is the Guernsey Pound, which has parity with the GB Pound. There is no National Health Service on Guernsey, for dentistry or medicine, although referred secondary medical and surgical specialist care and hospital administrations are free.

The registered dentists in 2013 in Guernsey included 1 orthodontist, 2 surgical dentists, 1 periodontist and 1 visiting endodontist (one day per week). Oral healthcare is normally provided in private practice, by the general practitioners who are in 13 practices (including one on Alderney). There is a part-time surgery in the summer months only on Sark, run by one of the dentists from Guernsey. The Guernsey dental practitioners also attend to their patients in hospital. The hospital "Dental Unit" is the GDPs who access the hospital facilities for their patients. Emergencies are covered on a rota of GDPs. It is a requirement of practising and of the Guernsey Dental Association (GDA) membership to take part in the rota. There is one visiting Oral Surgeon for more complex cases on referral.

Dental auxiliaries on Guernsey: there are 13 hygienists, 6 technicians (including 2 on Alderney), 2 of whom are clinical dental technicians and one dental nurse for each dentist (it is thought that about 30 are qualified).

Public dental healthcare is provided for some eligible children up to the age of nineteen, in full time education. The Children's Dental Service has one full-time and two part-time dentists providing free dental care for those eligible children and those referred under special criteria. In 2006 the States decided to abolish free dental treatment for all children, with only those referred being entitled to free treatment. Orthodontics (excluding referred IOTN class V cases) is not available under this scheme.

The Guernsey Social Security Department will pay for treatment for adults on benefits, or after means testing. This treatment is provided in private practice paid for by the Guernsey Social Security Department on a scale of fees. The fee scale is agreed between the Guernsey Social Security Department and the Guernsey Dental Association (GDA).

All dentists on Guernsey are members of the GDA. Members fill the officer posts in rotation.

Guernsey is not open to dentist newcomers. The Health and Social Services Department registers all dentists, hygienists and CDT's in the Bailiwick of Guernsey and monitors numbers with the GDA. All dental professionals must also be registered with the GDC in London. Also, unless the individual dentist already has a housing rights qualification, then the person requires a housing licence to reside in local market accommodation. These licences are issued by the Housing Department and numbers are restricted. The Housing Department also issues right to work documents.

Usually entry to Guernsey by a dentist is when a dentist here retires or leaves the islands. Jobs are advertised in the usual dental press and the local "Guernsey Press" newspaper. The setting up of a practice premises is restricted by the Environment Department who govern either new premises or a change of use of existing premises. Both types of permission can be very difficult to obtain.

Jersey

Jersey has a land area of 116 sq km and a population of 95,732 (July 2013). Its capital is St Helier. The GDP was €57,000 (PPP) per capita in 2011 (latest figures) and the currency used is the Jersey Pound, which has parity with the GB Pound.

Oral healthcare is provided mainly by the General Practitioners on the island, under private arrangements. There is a Jersey Dental Fitness scheme, for children only, which the *States* (government) subsidise at £6 (€8.50) a month to families whose income is less than £40,580 (€51,265) a year – and whose children are between 11 and 18 (or up to 21 if they are in full-time education).

There is also a Community and Hospital Dental Services Scheme, provided by salaried dentists, for those from 4 to 11 years of age. For the over-65s, who are on low income, they have access to a Dental/Optical state-funded scheme which reimburses charges at up to £250 (€316) per year. The programme is means tested to be restricted to those on low income (so being a non tax-payer, resident in Jersey and having less than £20,000 (€25,266) capital assets).

Based at the hospital there are 2 resident orthodontists, 2 oral surgeons, 1 restorative specialist and 1 community dental officer. The island also has 1 resident specialist endodontist. Various dental specialists visit the island by arrangement with the hospital or with individual practices. These include oral surgeons and orthodontists. There are also about 10 dental hygienists and 3 independent laboratories. The practices and the hospital employ about 70 dental nurses in total.

Most of the dentists on the island (approx. 70) are members of The Jersey Dental Association. It is not possible for persons who are not residentially qualified for living on the island to set up practice as an independent dentist in Jersey.

Dentists and dental hygienists are required to register with the Royal Court of Jersey, as well as with the UK General Dental Council, whose ethical rules must be followed

The Isle of Man

The Isle of Man is a dependency of the British crown but has never formed part of the United Kingdom. It is situated in the Irish Sea approximately half way between Ireland and Great

Britain, and the land area is 572 sq km. There is a population of 76,220 (2008) and the capital is Douglas.

The Isle of Man is politically stable and enjoys parliamentary government without party politics. Its 1,000 year-old parliament, Tynwald presides over the Island's domestic affairs including, specifically, taxation. The UK is responsible for the Island's defence and foreign affairs.

The island forms part of the EU single market and VAT area but is otherwise not part of the EU fiscal area. Under protocol 3 of the UK's Treaty of Accession, the Isle of Man is part of the customs territory of the Union. It follows that there is free movement of industrial and agricultural goods in trade between the Island and the Union. The Isle of Man neither contributes to, nor receives from, the funds of the European Union, thus guaranteeing the Isle of Man's fiscal independence. The Isle of Man has an English common law type legal system and tends to follow English legislation. There is an infrastructure of sophisticated legal and other professional services, and direct taxation is low.

The currency is the Isle of Man Pound, which also has parity with the GB Pound.

There is no dental school on the Island and dentists register as such with the UK's General Dental Council, whose ethical rules are followed. In 2013 there were 61 registered dentists on the island. Whilst the island does have a local dental association, the number of members is not available. Many dentists are also members of the BDA and are attached to an English Branch based around Liverpool.

Oral Healthcare in the Island includes private care delivered by General Practitioners in 19 practices. They may also contract to work inside the Island's NHS – which follows closely the regulations and statutes of the NHS in England, but is wholly independent of this. In 2013, 40 dentists were providing such care.

The Community Dental Service is an Island-wide service providing a range of appropriate oral health care services in 3 clinics within the NHS, for schoolchildren and for adults with special needs. Screening for oral health care services is carried out in all the Island's schools.

Gibraltar

Gibraltar is a British Overseas Territory located on a small peninsula of land connected by an isthmus to the southern coast of Spain, in South-western Europe, and separated from the African continent by the Strait of Gibraltar, which links the Mediterranean Sea and the North Atlantic Ocean.

Gibraltar was ceded to Great Britain by Spain in 1713 and was formally declared a colony in 1830. Since 1967, Gibraltar has been a self-governing overseas territory of the UK, under Queen Elizabeth 2nd as the monarch. A governor is appointed by the monarch; following legislative elections, the leader of the majority party or the leader of the majority coalition is usually appointed chief minister by the governor. There is a unicameral Parliament (18 seats: 17 members elected by popular vote, 1 for the speaker appointed by Parliament; members serve four-year terms).

Gibraltar is self-sufficient and benefits from an extensive shipping trade, offshore banking, and its position as an international conference centre. Tax rates are low to attract foreign investment.

The population at July 2013 was 29,111 and languages are English (used in schools and for official purposes) and Spanish. The currency used is the Gibraltar Pound (parity with Sterling). The GDP at Purchasing Power Parity per capita was \$43,000 in 2011. Health expenditure was expected to exceed £90m in 2013 [source Ministry for Health] – about 10% of GDP.

There are no dental schools in Gibraltar and education and training takes place abroad, usually in the UK. Dental Practitioners have to register with the Medical Registration Board of Gibraltar. There is no post-qualification vocational training or mandatory continuing education.

Dental hygienists train abroad, usually in the UK as there is no training in Gibraltar. The hygienists work in private practice under direct supervision.

Dental Technicians train overseas, usually in the UK, receiving degrees or diplomas as appropriate. The title is not protected, they also do not need to register and continuing education is not mandatory. Chairside assistance may be provided by Nursing Auxiliaries, Nursing Assistants or Dental Nurses. The title is not protected and training, which is not formal, is provided at the workplace. Currently, registration is not necessary, nor is continuing education mandatory.

The Gibraltar government advised (in 2013) that regulation of the professions of Dental Hygienist, Dental Technician and Dental Therapist was under consideration and if effected, these titles will become protected.

There is a social insurance Scheme which entitles residents to healthcare; the dental aspect of this is a core but largely age-limited service. The Scheme provides a full range of treatment options, including orthodontics, but only for the under-18s and students. There is a limited service provided for 'social cases', and a very basic emergency only/extraction service for everyone else.

Dentists employed by the Government are salaried. Those that are not salaried are funded entirely by the patients.

There is no separate Dental Association, but dentists are members of the Medical Association.

The Medical Registration Board has statutory responsibility for ensuring that dentists are fit to practise. However, there have been no serious cases against dental practitioners since the middle 1990s.

Health and Safety is handled by the relevant government departments. Dental practitioners' use of imaging equipment is regulated by statute.

Numbers in Gibraltar in 2013	
Registered dentists	33
Active Dentists	32
Specialists:	
Orthodontics	1
Oral surgery	1
Restorative Dentistry	1
Active dentists who are female	46%
Working in General Practice	77%
Working in public salaried service	23%
Number of dental hygienists	3

This data for Gibraltar is not included in the UK figures

Many employers provide private insurance to assist with the cost of dentistry.