Preface

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This has been an important year for how patient care in the English NHS is organised, with the *Health and Social Care Act* (2012) introducing substantial changes for the NHS. One of the consequences of these reforms for the *Unit Costs of Health and Social Care* has been that some information required to update estimates is now sourced from newly-created organisations, many of which became operational on 1 April 2013 (Department of Health, 2013a). Keeping abreast of these changes to reflect current practice and produce accurate costs has been an important element of this year's work. One example, summarised below, is the new funding structure for education and training: the structural overhaul has had an important impact on the unit cost calculations (Department of Health, 2013b).

With increased demand for health and social care expected (Imison et al., 2009), health and local authorities are faced with more pressure than ever to keep a tight rein on expenditure, so information on the costs of services continues to be an important contribution to accurate planning and commissioning. As in previous years, this publication includes new information, sometimes requested via our feedback form (http://www.pssru.ac.uk/project-pages/unit-costs/feedback.php) and sometimes as a result of regular literature searches carried out to ensure any recently published work is not missed. Here, as in previous years, after discussing the new funding structure for education and training, we describe distinctive aspects of this volume (guest editorial, articles and new tables), changes to routine information and work in progress.

Education and training

When we estimate the cost of qualifying a professional, for pre-registration courses we need to consider the costs of tuition, the net cost or value of clinical placement, and living expenses over the duration of the course. These costs are then incorporated into the unit cost calculations using an appropriate method of annuitisation (Netten & Knight, 1999; Curtis & Netten, 2007; Curtis et al., 2012). Although the sources of information used to update living expenses remain unchanged (National Union of Students, 2013), a new structure has been put in place to fund tuition and clinical placements. Under the new system the strategic education funding responsibility will be retained by the Department of Health, but responsibility for the allocation and operational management of educational funding has passed to Health Education England (HEE) (http://hee.nhs.uk/), a new organisation which became fully operational in April 2013.

Pre-registration courses – tuition costs

In May 2010, the government's coalition agreement stated its aim to create a more sustainable way of funding higher education, and from September 2012 universities in England could raise tuition fees to up to £9,000 per year (Department for Business, Innovation & Skills, 2012). The average tuition fee for all courses in 2013 for England was £8,354, and students are entitled to receive loans from Student Finance England for maintenance and tuition fees, depending on their circumstances (National Union of Students, 2013).

As well as changes for the students, a new system has been implemented to allocate funding to universities and placement providers, and this is summarised below both for medical and non-medical students.

Medical students

As in previous years, the Higher Education Funding Council for England (HEFCE) provides funding for the tuition fees for undergraduate doctors (years one to five). HEFCE allocates subjects to price groups using an activity-costing system called TRAC (T) – Transparent Approach to Costing for Teaching (HEFCE), 2012).

Interim arrangements have been put in place for students starting courses between 2012 and 2014. For students undertaking the five-/six-year undergraduate medical degree, HEE funds the costs of tuition through the NHS Bursary Scheme of up to £9,000 per medical student for years five and six of study.

For graduate students studying the four-year accelerated or 'fast-track' medical degree (9% of all pre-registration medical students: Higher Education Statistics Agency, 2013), HEE provides funding to the Department for Business, Innovation and

Skills (BIS) to fund a tuition fee loan of up to £5,535 for medical students in the first year of the course. Students have to self-fund £3,465 of the tuition fee costs in this first year. From the second year onwards, HEE funds the first £3,465 of the tuition fee cost through the NHS Bursary Scheme and provides funding to BIS for a tuition fee loan of up to £5,535 per medical student.

The arrangements for students starting courses in 2015 have not yet been confirmed.

Non-medical students

HEE also funds the tuition costs of students accessing non-medical healthcare training courses. For the majority of professions, a benchmark price (BMP) tariff is used to set the funding for courses, whilst the funding for a small number of courses is negotiated locally. These tariffs ranged from £8,152 to £10,313 per student in 2012/2013, with increments for students attending universities in outer and inner London.

Pre-registration courses – clinical placement costs

Currently the NHS is working to provide a better understanding of how much it costs to train professionals as there are few organisations with a full understanding of their own costs. Better costing will lead to more accurate tariffs that more closely match the costs of training delivery. *Healthcare Finance* (July/August 2013) provides more details of this work (http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CC8QFjAA&url=http%3A%2F%2Fwww.hfma.org.uk%2Fdownload.ashx%3Ftype%3Dinfoservice%26id%3D630&ei=9j1VUpPcBPHa0QXRpoGwDg&usg=AFQjCNH3WxTfhZMddNaavQv9cbPiqgNa-A&sig2=NaSbnHLDHfyRH8KlVelC4A/).

Medical students

HEE now funds the clinical placements of undergraduate medical students. In the majority of cases, these are undertaken in the third, fourth and fifth year of a student's undergraduate course in hospitals and other healthcare settings around England. Funding is provided through a tariff system which is adjusted by the Market Forces Factor (MFF) for geographical cost factors (Department of Health, 2013c). In 2013, this tariff was fixed at £34,623 per year of placement time. Clinical placements for the fast-track degree are also funded through this system, but normally in years two, three and four of the course.

Non-medical students

From 1 April 2013, HEE has provided funding for the clinical placements of non-medical healthcare students. Again, funding for these placements is provided on a tariff basis (adjusted by the MFF), which ensures transparency and equity of funding by providing a single funding level for all providers. The national tariff rate from 1 April 2013 is £3,175 (Department of Health, 2013c).

Postgraduate medical education

From April 2013, HEE is responsible for funding providers to support postgraduate medical trainee placements. The funding is based on the Review Body on Doctors' and Dentists' Remuneration (DDRB) rates (http://www.ome.uk.com/DDRB_Reports.aspx). From 1 April 2014, this funding will be replaced by a tariff covering 50 per cent of the basic salary costs of the trainee plus a placement fee which will be adjusted for geographical cost factors by using the MFF. HEE is currently finalising the transition plans for the new tariff.

What's new in the publication this year?

Guest editorial

Following the Department of Health's commitment to sustainable practices in the delivery of services (HM Government, 2008), this year John Appleby, Chris Naylor and Imogen Tennison have provided a guest editorial, *Widening the scope of unit costs to include environmental costs*, which discusses ways of measuring unit carbon costs. In future years we hope to be able to include these costs in the unit costs calculations.

Articles

The first article, by Barbara Barrett and Hristina Petkova, both from King's College London, reviews cost studies focusing on cognitive behavioural therapy interventions. The article shows the cost per hour for each intervention, the patient group and therapists involved in providing the treatment, and it also identifies factors that influence the variation in costs.

Jonathan Stanley from the National Centre for Excellence in Residential Child Care and Andrew Rome of Revolution Consulting have provided our second article. This discusses the results of a survey distributed to local authorities to establish the average price per week paid for a residential placement to private and voluntary providers. In local authorities which operate their own children's homes, the weekly cost of these 'in-house' homes was also requested. This article also discusses the complexity of the residential care market for children, and what steps need to be taken to understand the costs better and ultimately provide better outcomes for children.

The third article, by Cate Henderson and colleagues (PSSRU, London School of Economics), provides the costs associated with supporting telehealth and telecare. These costs were calculated as part of the Whole Systems Demonstrator pilot and evaluation, which was set up by the Department of Health (2011a) to show the capabilities of telehealth and telecare.

New unit costs

Adult

End-of-life care

End-of-life care is an important national priority in England (Department of Health, 2008). Following on from the inclusion of costs relating to end-of-life care at home for children (page 92 in last year's volume), this year we have included a summary of research carried out by the Nuffield Trust (table 7.11) (Georghiou et al., 2012) on behalf of the National End of Life Care Intelligence Network (http://www.endoflifecare-intelligence.org.uk/home/). This provides the costs of care services in the last twelve months of life, as well as the average cost per decedent and per user for each type of service.

Dementia memory service

In response to government priorities (Department of Health, 2011b), we have included the cost of a dementia memory service (table 1.8) provided by the South London and Maudsley NHS Foundation Trust. In addition to using data from a national audit, we have provided the average total annual cost per clinic, the average cost per patient attendance, and the average minimum and maximum costs per patient attendance (http://www.rcpsych.ac.uk/workinpsychiatry/qualityimprovement/nationalclinicalaudits/memoryservicesaudit.aspx).

Care homes

This year the Laing & Buisson (2013) data on care home fees are split into their component parts – care costs, accommodation costs, ancillary costs – and the survey also provides information on the operator's profit. We have drawn on this information to improve the estimates for private sector nursing found in tables 1.1 and 1.2.

In chapter 18 of this report is a list drawn from Laing & Buisson care homes data (2011), showing the average minimum and average maximum fees for residential and nursing homes in the UK for different client groups.

Learning disabilities models

As part of the process of improving information about support for people with learning disabilities (LD), and to support local authorities, Laing & Buisson (2012) was commissioned by the Department of Health to undertake a short piece of work to compile and describe a range of illustrative cost models. These models, depicting the unit costs of different approaches based on input from providers form the basis of tables 8.4.1-8.4.2.

Parenting programmes

In table 6.15 we have drawn on a study by Bonin and colleagues (2011) to provide the cost of delivering group-based parenting programmes.

Sleep management care package costs

In table 6.16 we have drawn on work by Beresford and colleagues (2012) to provide the cost of five sleep interventions for children with disabilities. This study was funded by the Centre for Excellence in Outcomes in Children and Young People's Services (C4EO) and undertaken by the Social Policy Research Unit at the University of York and Personal Social Services Research Unit at the University of Kent.

Ambulance costs

Until 1 April 2011, ambulance responses were split into three categories: A – immediately life-threatening; B – serious but not immediately life-threatening; or C – not immediately serious or life-threatening (National Audit Office, 2011). Now that ambulances are treating patients at the scene, two new categories have emerged (a) hear and see; and (b) see and treat. These are discussed in more detail in *Transforming NHS Ambulance Services* (National Audit Office, 2011), and the new costs are reported in table 7.1.

Equipment costs

In previous years, costs for local authority equipment and adaptations have been drawn from a Benchmark Study carried out for the Department of the Environment by Ernst & Young. Although this study was rather dated, the *BCIS Access Audit Price Guide* (Building Cost Information Service, 2002) suggested that these prices were in line with our uprated costs in the ten years that followed. This year we have replaced these costs with a price list found in the *TCES National Catalogue of Equipment for Independent Daily Living* (http://www.national-catalogue.org/smartassist/nationalcatalogue/) and *Equipment for Older and Disabled People: an analysis of the market* (Consumer Focus, 2010). Prices have been annuitised over the useful life of the aid or adaptation in the standard way (see table 7.3). We hope in future years to be able to include the costs for assessing service users' needs and installing the equipment.

Care packages – health

In the 2011 *Unit Costs of Health and Social Care* publication, we extracted information from the national evaluation of the individual budget pilot projects (Glendinning et al., 2008) to provide packages of social care received by more than 1000 service users representing four client groups: older people, people with learning disabilities, people with mental health problems and people with physical disabilities. This year, we have extended our section on care packages and have drawn on the personal health budgets programme (Forder et al., 2012) to provide information on health service use and costs. Table 8.3 shows the average cost of health services received by a sample of more than 1000 users recruited a year before the new programme was implemented.

Children's services

Support foster care case studies

Tables 8.11.1-8.11.2 show the costs of providing support care and accompanying services: for example, a parenting programme and being given housing support and budgeting advice. This work is drawn from research carried out by the Centre for Child and Family Research (CCFR) at Loughborough University, and is based on two real-life case studies. The *Unit Costs of Support Care* provides a comparison between the costs of providing support care and associated intensive support services or full-time foster care and associated intensive support services (The Fostering Network Wales Strengthening Families Support Care Project, 2013).

Cost pathways on return home from care

In light of the research findings about the lack of support leading to breakdown of reunification in some circumstances, the Department for Education has worked with Loughborough University to draw up a number of scenarios reflecting the costs of returning children home based on a range of ages, circumstances and placement types. Information for tables 8.10.1 to 8.10.4 has been drawn from this study (Department for Education, 2013). The tables make use of previous research studies (Ward et al., 2008; Holmes & McDermid, 2012; Holmes et al., 2012) to provide a series of estimated unit cost trajectories for children returning home from care.

Intensive family support (IFS) services

This year we have drawn on work carried out by the Centre for Child and Family Research which explored the costs of children's intensive family support services received by 43 families in two local authority areas (Department for Education, 2013). This has been added to table 11.8 for a family support worker.

Changes to routine information

Superannuation

An important component of the calculation of salary-related costs for health and social care professionals is the amount employers contribute to national insurance and superannuation. The rate paid by employers of NHS staff has remained at 14 per cent for a number of years (http://www.nhsbsa.nhs.uk/Pensions.aspx), but superannuation payments in local authorities generally increase in line with pay increases. This year, we surveyed 30 local authorities and, based on responses from 20, we have increased the average rate quoted for employer's contribution to superannuation from 18 to 20 per cent, resulting in an overall increase in the costs reported in this volume.

Inflators

The Personal Social Services (PSS) indices used to inflate social care services (both adult and child) are usually provided by the Department of Health. This year, the social care workforce data in the adult sector have been collected by Skills for Care, with financial support from the Department of Health. As children's social care services are not included in the Department of Health's remit, an inflator for children's services has not been identified this year. This means that, where necessary, all social care services (including children's services) have been uprated using the inflator intended for adult services. This will be reviewed for future volumes.

Salaries

On 1 April 2013, the NHS Information Centre reverted to its statutory name, the Health & Social Care Information Centre (HCIC) to reflect its broader responsibilities. Prior to this, a consultation was held about the method for calculating salary scales for health professionals. The old method estimated mean and median basic and total full-time equivalent earnings using the three most recent months of data. Now the HCIC publishes the mean basic salary paid to a full-time employee in a 12-month period (Health & Social Care Information Centre, 2013). Further information taken from the Electronic Staff Records is provided on the mean basic salary for staff not included in the publicly available data.

To be consistent with this new method, this year the *Unit Costs of Health and Social Care,* which has previously based its unit costs on median salaries for most staff groups, now bases calculations on mean basic salaries. In 2012, as there was little difference between the mean and median salaries for most Agenda for Change bands (the average median salary for all bands being 2.6% higher than the average mean salary), this adjustment has made little difference to our unit costs.

As in previous years, the *Unit Costs of Health and Social Care* has assigned an Agenda for Change band to a particular professional based on the results of a job evaluation carried out by the Job Evaluation Group (JEF), a subgroup of the NHS Staff Council.
(http://www.nhsemployers.org/PayAndContracts/AgendaForChange/NationalJobProfiles/Pages/NationalJobProfiles.aspx). If readers would like to substitute this for a higher or lower band, full information can be found in section V of this publication.

For hospital-based doctors, the *Unit Costs of Health and Social Care* publication has traditionally used the mean full-time equivalent total earnings to reflect the high percentage of doctors working long hours. This year, as with all professionals, the mean basic salary will be used. This change in method is reflected in the lower unit cost for all hospital doctors.

For readers who would like to base their unit costs on mean full-time equivalent earnings, we note in each table the percentage which should be added on for non-basic pay components such as shift and on-call payments, geographic allowances and overtime. These payments vary between staff groups, and more details of these payments can be found at the following link: http://www.hscic.gov.uk/catalogue/PUB11612/.

Ongoing work

Time use

In last year's volume, we discussed the importance of ensuring that all staff time is appropriately allocated and the difficulty of obtaining studies which provide this information. We also took the opportunity to provide a short article describing the time diaries which were used in the Unit Costs in Criminal Justice (UCCJ) research. This year, so that we can provide a cost per patient-related hour for all professionals contained in the Unit Costs of Health and Social Care publication, we have prepared a survey (https://www.surveymonkey.com/s/SZMF5YL/) which will be distributed via social media and, where possible, advertised on the websites of professional groups such as the Royal College of Nursing and the British Dietetic Association. The link to this survey also appears on the appropriate tables in this report for each professional, and we would like to encourage as many health and social care professionals as possible to complete it.

Capital

The method we use to incorporate the capital element of a service (building and land) has been discussed in previous editions of this publication (see 2010 and 2003). Where actual building costs for services are not available, the convention has always been to use 'new-build' replacement costs, which are available quarterly from the Building Cost Information Service (BCIS). Although the BCIS provides a great deal of valuable information, it does not include other costs to the building's purchaser, such as fees, furniture and fittings. Work is currently underway to update these 'additional' costs, as it is now more than ten years since the original research. The results will be reported in next year's *Unit Costs of Health and Social Care* publication, together with results from commissioned work to provide up-to-date estimates of land costs.

Call for information

Services for adults with a physical disability

In 2002, the Christian-based charity John Grooms provided us with information on the costs of services for people with physical and sensory impairments (see chapter 5 of last year's publication). Each table included information about the types and severity of conditions among the people supported, the facility's purpose, and the type of service provided. Given our rule of excluding information which is more than ten years old, this year we have only included estimates from national sources of data (PSS EX1). We hope in the future to be able to draw on new studies and would appreciate any information on this topic.

Other information

Criminal justice services

Following on from the article by Nadia Brookes and Ann Netten on *Using time diaries to contribute to economic evaluation of criminal justice interventions* we included in last year's *Unit Costs of Health and Social Care* publication, the full report on *Unit Costs in Criminal Justice* is now publicly available: http://www.pssru.ac.uk/archive/pdf/dp2855.pdf. Also published in November 2012 was the Social Research Unit's technical report on *Investing in Children* http://dartington.org.uk/investing-in-children-overview/. This includes unit costs for youth justice, education, early years and child protection, and social care interventions. It also contains information on criminal justice sector and victim costs.

The value of volunteering

This year the Department for Work and Pensions (DWP) and the Cabinet Office have published a report *Wellbeing and Civil Society*, which estimates the value of volunteering using subjective wellbeing data https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221227/WP112.pdf.
Using data on life satisfaction and volunteering status in the British Household Panel Survey (BHPS), the value of volunteering to the volunteer was identified for people aged over 16 years. The equivalent of the wellbeing benefit derived from volunteering was estimated to be about £13,500 per year at 2011 prices.

Acknowledgements

As in previous years, we would like to encourage readers to continue commenting on how the unit costs estimates are useful to them by e-mailing L.A.Curtis@kent.ac.uk or by filling in the feedback form, which is a tool used to guide our research. This can be found on the PSSRU website on http://www.pssru.ac.uk/project-pages/unit-costs/feedback.php. Also,

if you are able to assist our research on how professionals spend their time by forwarding the Survey Monkey questionnaire to health and social care professionals you are working with, we would be very grateful. The link to this survey is https://www.surveymonkey.com/s/SZMF5YL/.

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