Preface

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As in previous years, this section is devoted to introducing new information included in this year's publication and to discussing any aspects of work which have had an impact on the unit costs calculations. This preface introduces our guest editorial and three short articles which discuss methodological issues to consider when estimating costs. New schema are highlighted as are any revisions made to the unit costs in the light of improvements to routine data sources.

In the preface to the previous volume, we also took the opportunity to review the aims of the publication and to reflect on how it has expanded in response to government policy. In this 20th edition, and to gain some measure of its value we present some areas in which the volume is used, as identified by readers contacting the Personal Social Services Research Unit (PSSRU) and web searches. We would like to encourage readers to continue commenting on how the unit costs estimates are useful to them either by e-mailing L.A.Curtis@kent.ac.uk or by filling in our new feedback form which can be found on the PSSRU website on http://www.pssru.ac.uk/project-pages/unit-costs/feedback.php/.
This can influence what we include in future volumes and draw our attention to new work.

Policy appraisal

Impact Assessments are a key process and provide a consistent policy appraisal cycle to help policy makers fully think through the reasons for government intervention (http://www.bis.gov.uk/assets/biscore/better-regulation/docs/i/11-1111-impact-assessment-guidance.pdf/). When weighing up the various options, the costs of services are an important consideration. Recent impact assessments which have drawn on the unit costs estimates are the White Paper, Caring for our Future (Department of Health, 2012), and the Adult Social Care Law Reform (Law Commission, 2011). Other work drawing on the *Unit Costs of Health and Social Care* estimates are PSSRU's long term care financing models which have subsequently been used to inform decision making by the Royal Commission (Royal Commission on Long Term Care, 1999; Snell et al, 2011) and the Dilnot Commission (Dilnot 2011).

Developing an evidence base

In the UK, one of the bodies that informs evidence-based practice is NICE (National Institute for Health and Clinical Excellence) which sets guidelines based on research findings that have been subject to scrutiny. Considerable weight is placed on the relative cost effectiveness of therapies in making judgements about recommending one treatment over another. The Unit Costs publication is recommended for use in the *Assessing Costs Impact Methods Guide* as a source of unit costs data. http://www.nice.org.uk/media/99A/F8/Costing_Manual_update_050811.pdf/.

Research and development

We are aware than many researchers are using our cost estimates and it would be impossible to provide a full citation list. To assess the impact of the unit costs publication, we searched on the Web of Science database; the publication has been cited in 68% of economic evaluations which have taken place in England and which were published between 2008 and 2012. There is also evidence to suggest that the publication has been cited in 25% of all European economic evaluations. We also know that the publication is downloaded, either in part or fully, more than 600 times in an average month, but more than 1000 times during the first month of publication.

Cost of illness studies

To make informed choices about which health problems to address, it is important to know the economic burden imposed by the various health problems. A *cost of illness* study provides a monetary estimate for the burden of diseases. Several examples of these studies which have drawn on the Unit Costs publication are available on the National Audit Office's website: http://www.nao.org.uk/.

Justifying and discussing choices

Feedback from local and health authorities suggests that our unit cost estimates are used to help them understand the cost implications of policy options and choices. They also provide a benchmark for prices. Understanding how costs compare, what drives spending levels (and unit costs) and how these relate to service quality is critical. The Social Care Institute for Excellence (SCIE) has drawn on the unit cost estimates in the context of its practice development role within the social care sector. Work in one local authority involved assisting the intellectual disabilities residential support manager to assess whether their in-house service provides value for money. The unit cost estimates were compared with the authority's unit costs to help decide whether, in view of the outcomes achieved, in-house provision appears to be cost effective. Another example involved a voluntary sector provider of young carers' services who wanted to consider whether replacing qualified with unqualified social workers would achieve the required savings. They didn't proceed because it was thought potential savings from lower unit costs would be outweighed by compromises to quality and likely outcomes.

In the House of Lords, the unit costs estimates have been quoted on several occasions in discussions about available services. One example of this is when Her Majesty's Government was asked for a breakdown of the costs of placing children in the care of a local authority.
http://www.publications.parliament.uk/pa/ld201011/ldhansrd/text/111103w0001.htm#11110390000447/

Generating cost profiles

Feedback from users suggests that cost profiles of patients are being generated by applying the unit costs estimates to patient encounters. This enables future predictions to be made of costly patients so that they can be targeted for monitoring.

What's new in the publication this year?

Guest editorial

This year, a guest editorial has been provided by Susan Griffin and Simon Walker from the Centre for Health Economics at York University entitled "Appropriate Perspectives for Health Care Decisions: principles and implications for policy." This quite technical article discusses current methods employed to evaluate the cost-effectiveness of technologies and the benefits of recommending a broad societal perspective. This would allow impacts on other areas of the public sector and the wider economy to be formally incorporated into analyses and decisions.

Articles

In last year's Unit Costs volume, the importance of ensuring that all staff time is appropriately allocated was discussed in the preface, as was the difficulty in obtaining studies which provide this information. As a result of the continuing demand for this information, our first article by Nadia Brookes and Ann Netten discusses a method of collecting time-use data. Time diaries were used in *The Unit Costs in Criminal Justice* (UCCJ) project commissioned by the Ministry of Justice between 2007 and 2010. The article provides a detailed description of the costing activity and lessons learned during the exercise. It is hoped that a similar version of this time diary can be used to collect time-use data for health professionals to inform future volumes.

Improving Access to Psychological Therapies is an NHS programme (IAPT, http://www.iapt.nhs.uk/) rolling out services across England offering interventions for people with depression and anxiety disorders. In our second article, Eva Bonin (from PSSRU at the London School of Economics) provides the costs of delivering cognitive behavioural therapy in a workshop format and also discusses the challenges of costing complex multi-site interventions.

The third article by Rita Faria and colleagues on *a review of the approaches and monetary value of informal care* is the latest in our intermittent series on informal care, the first of which was written by Jennifer Francis and David McDaid and published in the 2009 edition of the *Unit Costs of Health and Social Care*. The article describes the advantages and disadvantages of four key methods of costing informal care.

New unit costs

Public Health interventions

In last year's volume, we selected interventions for inclusion that may reduce long-term workplace absence, help manage high-risk drinking and reduce harm caused by smoking. This year we have added new information from the Liverpool Public Health Observatory Series on the costs of Well-Man services and a Health Action Area community programme (see 7.9) http://www.liv.ac.uk/PublicHealth/obs/index.htm/

Behavioural Activation

Behavioural Activation Therapy has emerged as an effective treatment for depression in recent years. Spates et al (2006) and David Ekers & colleagues (2011) found that behavioural activation carried out by non-specialists appears effective. Schema 2.6 provides the costs of this intervention.

Common Assessment Framework

A core element of government policy for child and family services is the notion of multi-agency collaboration to meet the needs of children, and in particular the use of a basic common assessment tool to provide information swiftly and consistently when making referrals. This year, the Centre for Child and Family Research have provided examples of case studies relating to the Common Assessment Framework introduced in local education authorities between April 2006 and December 2008 and discussed initially in the *Every Child Matters Green Paper* (Department for Education, 2003). Three examples have been drawn from a report by Lisa Holmes and colleagues (2012) (See 8.7.1-8.7.3) which show the costs incurred from when the needs of the child have been identified to case closure.

Care packages for children in need and children in care

Using data from the Cost Calculator (Ward et al, 2008), previous editions have included the costs of care packages for looked after children. Between 2007 and 2008, two complementary mapping exercises were undertaken to inform the development of the Cost Calculator and the replacement Children In Need Census (Holmes et al, 2010). These studies explored the range and types of children in need services, and the availability of child level data for those services. As a result, this year we have been able include care packages for children in need (8.5.1-8.5.4) and have also been able to update the care packages for children in care (8.4.1-8.4.4).

Services for young people with complex needs when transferring to adulthood.

Given policy interest in the transition of children to adulthood (Department of Health and Department for Education and Skills, 2003), information has been drawn from Soper & colleagues (2010) who have reported the costs incurred for young people with complex needs when transferring to adult services. The three examples are examples of high, medium and low cost services (8.6.1-8.6.3).

Decision making panels

Following on from the Holmes article in last year's Unit Costs volume on the cost and capacity implications of implementing the Laming (2009) recommendations, this year we have included the costs of implementing the Local Safeguarding Children's Boards, introduced as a result of the Laming recommendations. Schema 6.16 provides the costs relating to the infrastructure, activities such as travel to and from meetings, preparation for meetings and provision of feedback to their agency.

Specialised rehabilitation services

As a result of the Carter Review (Department of Health, 2006), the Department of Health has revised its Specialised Services National Definition Set (SSNDS). The third edition *No 7 Brain Injury and Complex Rehabilitation* identifies three main levels of service: Specialised (tertiary) rehabilitation services, Level 2 local specialist rehabilitation services and Level 3 non-specialist rehabilitation services. This year, following collaboration with Professor Lynne Turner Stokes and Diana Jackson at Kings College, London, we have included the costs of these three neuro-rehabilitation services (7.10.1 – 7.10.3).

Adoption

In view of the recent announcement that adoption is one of the government's top priorities (http://www.education.gov.uk/childrenandyoungpeople/families/adoption/a00205069/action-plan-for-adoption-tackling-delay/) and the report *An Action Plan for Adoption, Tacking Delay* (Department for Education, 2012), this year we have drawn together from various studies, information on the costs of adoption (see table 6.12). This schema provides the costs incurred during the various processes involved in adopting a child, from family finding to post-adoption support for families.

Hospice at home.

Last year, as a result of the Government's manifesto commitment in 2006 to improve palliative care services (Cochrane et al, 2007) we included the costs of packages of care for certain illness trajectories for children in need of palliative care. This year, we draw on the 'My Choices' study (Noyes et al, 2010) undertaken by a Bangor University team. Given that most parents of children with palliative care needs requested an option to choose home as a place for end-of-life care, we have provided a summary of the proposed **additional** costs associated with providing end-of life-care at home. These are found in table 6.9.

Improvements to routine information

Salaries

As a result of the Agenda for Change Pay reform (National Audit Office, 2008), the salaries of community and hospital based health care staff are estimated using the NHS Staff Earnings Estimates published by the Health and Social Care Information Centre (HSCIC) on a quarterly basis. This system has nine pay bands. The NHS professions in the Unit Costs publication have been matched to nationally evaluated profiles and the mid-points of salary bands used to obtain a unit cost. Readers of the publication can then substitute the salary for a lower or higher spinal point as necessary.

During 2010/2011, the HSCIC consulted users on changes to the way earnings information for NHS Hospital and Community Health Services (HCHS) staff in England is processed, defined and presented. These changes are intended to provide a better understanding of what NHS staff earn and produce a greater disaggregation of occupation categories in line with the National Health Service Occupation Code Manual. The greater disaggregation means that we can now more accurately reflect labour costs within the NHS. Further information on the consultation can be found in the following document: http://www.ic.nhs.uk/webfiles/Work%20with%20us/consultations/NHS_Staff_earnings_consultation/NHS_Staff_Earnings_Consultation_FINAL.pdf/ and more information on how this consultation will be used is available at: http://www.york.ac.uk/media/che/documents/papers/researchpapers/CHERP76_Productivity_of_the_English_NHS.pdf/.

This year we have explored the possibility of using this new salary data for our unit cost estimates but have concluded that further disaggregation is needed on the spread of bands contained within each salary provided for most professionals. We have therefore continued to base our unit costs on the mid-point salaries mapped to each generic profile during the Agenda for Change evaluation exercise. We have however also included in the note within the schema the salary for the profession as a whole, which allows readers to substitute the mid-point salary if it is more appropriate for their purpose. Where there is no ambiguity about salary bands, for example for consultant salaries (see 15.5-15.7) we have based the unit costs on the salaries provided for this occupation using the new information provided by the HSCIC.

The link to the National Health Service Occupation Code Manual is: http://www.ic.nhs.uk/pubs/gpearnex1011/. More information on salary estimates can be obtained from the Workforce Analysis Team at the Information Centre, telephone number: 0113 25 47040.

Working hours

In previous editions of the *Unit Costs for Health and Social Care* publication, we have calculated the number of working hours for each professional by subtracting annual and statutory leave days from week days per annum (260 days). Further subtractions have then been made for sickness (based on the national average) and training days assumed for each

professional. The costs for each professional have then been divided by working hours to obtain a unit cost per working hour.

This year, we have changed the method of calculating the number of working days in accordance with guidance from the workforce team at the Department of Health. For all NHS professionals, the starting point has been 225 working days (total weekdays minus annual leave and statutory holidays) as per Cabinet Office guidance (The Information Centre, 2012). Sickness days have been calculated by multiplying the percentage sickness absence days reported for each NHS staff group (The Information Centre, 2012) by the number of (Cabinet Office recommended) working days (225) and statutory holidays (8) (total of 233 days). The number of working days for this publication for each professional has then been calculated by subtracting from the number of working days (225) (Cabinet Office guidance), sickness absence days and the number of assumed study/training days recommended by professional bodies. This is then multiplied by the number of working hours per day (7.5 hours) (National Audit Office, 2009) to provide total working hours per year. In chapter 15 where guidance is provided on the number of working hours per day for hospital doctors, this number has been used instead of 7.5 working hours per day.

Inflators

It is important that our estimates reflect the current year of publication. Where information for services has been drawn from studies and no routine information is available to update the costs, our practice is to use inflators. The method of calculating the PSS inflators can be found in the 2005 edition of this publication (page 17) and further information on this inflator and others used in this publication can be found in chapter 16 of this volume.

For both the HCHS inflators and the PSS inflators, where estimates for the most recent year are not available, projections are made by the Department of Health or by PSSRU and agreed by the Department of Health. This year, the Department of Health have reported that the discrepancy between last year's forecast of the PSS pay inflators for all sectors and client groups (local authority and independent, child and adult services) was very different from the actual outcome. This was driven primarily by evidence from the *Annual Survey of Hours and Earnings* (ASHE) supplied by the Office of National Statistics, that pay remained relatively static in cash terms and negative in real terms (after accounting for inflation) during 2010/11 (see: http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2011-provisional-results--soc-2010-/stb---ashe-results-2011--soc-2010-.html/). In addition, Her Majesty's Treasury (HMT) has revised estimates for all years from 2004/05 and this is evidenced in the revenue index (Gross Domestic Product deflator), a component of the Personal Social Services pay and prices inflator (see table 16.3).

As a consequence of these revisions to the Personal Social Services (PSS) inflators, in this year's edition of the *Unit Costs of Health and Social Care* publication, many of our estimates are lower than in previous years.

General practitioner schema

In collaboration with the Department of Health, this year we have revised our method of calculating the GP unit costs (schema 10.8.a, 10.8.b and 10.8.c) and have used *the GP Earnings and Expenses* report instead of information from the *Investment in General Practice* report. See http://www.ic.nhs.uk/pubs/gpearnex1011/. This report provides a detailed study of salaried GPs in the UK which has enabled us to estimate costs more accurately and use the headings in other schema. The Executive Summary of the *Investment in General Practice* report identifies the differences between these two reports. See http://www.ic.nhs.uk/webfiles/publications/007_Primary_Care/General_Practice/investmentgp0611/Investment_in_General_Practice_2010_11.pdf/. Also, instead of using the *UK General Practice Workload Survey* for information on working time, we have drawn our information from a more recent survey carried out by the National Primary Care Research and Development Centre, which found that in 2011 GPs worked an average of 41.4 hours per week compared to the 44.4 hours reported in the Workload Survey.

Training costs

This year, we have drawn on work carried out by Bollington and John (2012) and the Department of Health which looked at pharmacy training workload and the capacity of NHS hospital pharmacy services in Wales. This information has been used to estimate the clinical placement costs for trainee hospital pharmacists and takes into account the number of hours of

supervisory time required to train the pharmacist and also an estimate of the benefits received from the trainee during the placement year (see 13.6).

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