Preface

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In 2016 at the start of a new contract, our research contacts at the Department of Health and Social Care (DHSC) consulted with analytical colleagues to find out how well the *Unit Costs of Health and Social Care* (UCH&SC) volumes met their needs. They also asked for suggestions on ways to enhance our unit cost calculations and whether new unit costs were likely to be required to support policy initiatives. With new priorities about to be established for the UCH&SC volumes, it is a timely opportunity to reflect on how the volume has expanded in response to this consultation.

Some suggestions could be dealt with in the 2016 edition; per day residential care costs were provided in the care homes schema for older people and for people requiring mental health support (see: 1.1-1.3; 2.2) as well as costs per week, so that easy comparisons could be made with NHS bed days. Also the duration of GP consultations could be updated thanks to new information published by the Royal College of General Practitioners in 2018. This enabled us to provide an insight into the reasons for the reduction of the net ingredient cost over time and to see how this has affected estimates made for the prescription cost per GP consultation in the UCH&SC volumes (see 2018 volume, pages 19-22). Although there was a request for calculations to be expressed more precisely than to the nearest pound, this was not considered appropriate given that all costs are averages for England and to provide this level of detail may be misleading.

A focus on different aspects of sexual health services was one of the consultation priorities and in Chapter 7 we have added the costs of HIV and AIDs treatments, related support services, family planning services and the treatment of genito-urinary (GUM) conditions drawn from the reference costs data collection. We have also identified and presented work from a study led by Louise Jackson and colleagues (2014), which explored the costs and outcomes of sexually transmitted infection screening interventions targeting men in football club settings (Chapter 7). Despite not having a detailed costing, attention was also drawn to work by Crawford et al. (2014) which provided a cost for brief advice and input given for excessive alcohol consumption among people attending sexual health clinics. This year, James Moore and Paula Baraitser have written an article intended as a resource for those planning to cost or commission online sexual health resources. This is described in more detail below.

Unit costs for abortion services were also requested and this year we have included a variety of costs relating to abortions of varying degrees of complexity encompassing day cases as well as longer hospital stays. A guide to fees for private and NHS funded abortions is also provided.

As a result of the Government's emphasis on empowering patients and targeted prevention set out in the Five Year Forward View (NHS, 2014, p. 10-13), requests were made for the cost of self-management support groups. Thus our 2017 edition included three new schema: self-management support using a digital health system for chronic obstructive pulmonary disease, nurse-facilitated self-management support for people with heart failure and their family carers, and the Diabetes Education and Self-Management Programme.

Video consultation costs were also a topic of interest and contact was made with Barts Health NHS Trust who, since 2011, have been exploring the use of video consultations via Skype for patients who do not need to physically come to the hospital (https://bartshealth.nhs.uk/virtual-consultations). Unfortunately no unit costs are available and to date we have not been able to identify any other work in this area.

Another clear strand of work over the last five years has been our collaborations with charities and other organisations which have enabled us to include or update the costs of several new services. These include: the peer intern (Chapter 11), advocacy for children with additional/multiple needs and counselling for children with mental or emotional difficulty (Chapter 6), supported-living homes for adults with autism and complex needs (Chapter 4), home adaptations (Chapter 7) and costs associated with the treatment of perinatal anxiety and depression (Chapter 2). Literature searches have also resulted in many additions such as interventions for

the management of obsessive compulsive disorder (Chapter 8) and positive behavioural support for adults (Chapter 4).

We have also continued to search for ways of improving underlying data. For example, an analysis of the *Foundation Trusts: Consolidated Accounts*, 2016 improved the accuracy of our hospital-based services; we found that overheads for NHS hospital-based services were lower than those for community-based services. Actuarial valuations produced by the administrators of the Local Government Pension Scheme (LGPS) have been analysed twice to enable us to update the rate employers contribute to superannuation for local government employees and new sources of information have been found for land costs. We also instigated and maintained contact with the Sustainable Development Unit (SDU) which is enabling us to include the environmental costs for more services every year thereby assisting with the goals set in 'Fit for the Future' (https://www.sduhealth.org.uk/policy-strategy/what-is-sustainable-health.aspx).

Web-based improvements

Over the last three years, we have developed new web-based facilities to better support our users. We now have an online unit cost database of unit costs for health and social care professionals (https://www.pssru.ac.uk/project-pages/unit-costs/unit-costs/unit-costs-2018/) and an accessible library of unit costs articles published in previous volumes (https://www.pssru.ac.uk/project-pages/unit-costs/). Comments from readers and download statistics over the last few years suggest that both have been well received. We are now planning to develop a time series of unit costs for many professional groups.

Our first video presentation giving an introduction to the *Unit Costs of Health and Social Care* was added to our website in 2018. This year, we have included the text to this first presentation and a second presentation focusing on methods will be made available next year.

Guest editorials and articles

Our guest editorial this year has been written by Candice Goold (Costing Lead at NHS England and NHS Improvement) and focuses on the introduction of patient-level costing (PLICS) which has replaced the national schedule of reference costs. As well as discussing the theory of patient-level costing and why it is preferable to service-level costing, an example is provided of where patient-level data has been used to assess the costs of different delivery modes for patient care.

In our first article (referred to briefly above), James Moore and Paula Baraitser have mapped the pathway for the delivery of online sexual health services and have generated a list of cost areas which should be considered when developing standard unit costs. This will be a useful resource for those carrying out an economic evaluation or costing services as none of the other articles found in the authors' literature search take into account the quality of care.

Our second article by Emma Frew and colleagues presents detailed information from three evaluations of obesity interventions for children and families. Further information on the hidden costs of obesity and the implications for long-term care can be found in Olena Nizalova's blog which is published on PSSRU's website https://www.pssru.ac.uk/blog/the-hidden-costs-of-obesity-implications-for-long-term-care/.

New work

Supported housing and specialised supported housing

To update our work on supported housing found in Chapter 4, we have drawn on two Laing and Buisson reports. Included in the same schema (4.3) are costs for a sub-category of supported housing known as specialised supported housing, which are properties developed in partnership with local authorities or the health service and are exempt from social rent requirements.

New ratio of direct to indirect time

We have included the costs of face-to-face time for an alcohol health worker (chapter 3) thanks to a study by John Marsden et al. (2019). They found that for every hour of face-to-face time, an additional 28 minutes of non face-to-face time was required.

Multi-professional clinical medication reviews in care homes for older people (CAREMED)

In last year's report, Tracey Sach's article focussed on whether two different methods of collecting primary and social care resource use data produces similar results. This year, information has been drawn from the same study (CAREMED) to provide a breakdown of the costs for providing patients' medication in care homes. Travel costs for review meetings have been included.

Dementia Memory Service

A study carried out by Mark Pennington et al. (2016) has provided the costs of assessing and supporting 1,353 people with suspected dementia from 69 Memory Assessment Services. This can be found in our care packages chapter (8).

Reference Costs

This year, our guest editorial introduced above discusses the gradual move away from service-level costing to patient-level costing (PLICS). Due to the timings of the annual release of hospital data however, this year's costs remain at the service-level and have been uprated to current values using the new NHS cost inflation index discussed below.

In Chapter 2 we report on adult mental health costs and have included some additional costs in this volume including specialist psychosexual teams. We have also added a second schema to our children's services' Chapter 6 which separates out the costs of mental health services for children and incorporates the drug and alcohol services which relate solely to children. Additionally in Chapter 7 we have added some new reference costs for abortion services.

Routine activities

Qualification costs

To improve the accuracy of our cost estimates for qualifying in certain professions, we first need to annuitise the investment in a way that reflects the expected return over time. But over what period should this expected return be measured? An important element is the number and distribution of years that health service professionals would use their training – their 'expected working life'. To estimate the expected annual cost of training in previous volumes, data on working lives were calculated using the 2001 Census and the Labour Force Survey. See articles: Curtis, Moriarty & Netten (2010), Curtis, Robinson & Netten (2009).

Unfortunately the most current Census (2011) no longer includes the variables necessary for us to carry out this analysis so the new estimates are not directly comparable to those noted in UCH&SC in Section V.

Nevertheless, we have been able to update the estimates for medical/dental professionals, nurses and social workers using the April 2018-March 2019 Labour Force Survey (LFS) data. We have found that the expected working life of a social worker has increased from 8 years to 19 years in just over ten years, possibly as a result of councils encouraging and supporting experienced professionals back into employment (https://www.theguardian.com/social-care-network/2016/nov/17/ive-returned-older-and-wiser-the-social-workers-coming-back-to-practice). This is reflected in the annual cost of qualifying social workers which, using the previous estimate of a social worker's working life was £25,417 in 2018, compared to £9,469 in 2019, using the most recent LFS. The expected working life of a nurse has also risen from 17 years (using the LFS 2003-2006) to 24 years (using the LFS 2017-2018); Burtney and Buchanan's report (2015) suggest reasons why this might be the case. On the other hand, we have found that the expected working life of medical practitioners has reduced from 26 to 22 years. Although, we were unable to separate medical practitioners from dentists

using the Labour Force Survey data, it is very likely that medical practitioners are working for fewer years as a result of the changes in the pension rules. Indeed it has been reported that an increasing proportion of GPs have been working less than 37.5 hours per week over the past five years. See:

http://www.pulsetoday.co.uk/news/gp-topics/employment/more-than-two-thirds-of-gps-work-less-than-full-time-says-official-data/20037483.article; https://www.telegraph.co.uk/news/2018/02/01/gps-retire-early-amid-clampdown-multi-million-pension-pots/.

NHS Cost Inflation Index

Until 2016/17, inflation faced by the NHS was measured by the Hospital and Community Health Services (HCHS) Index. The HCHS was a weighted average of two separate inflation indices, the Pay Cost Index (PCI) which measured pay inflation and the Health Service Cost Index (HSCI) which measured non-pay inflation. The Pay Cost Index and the Health Service Cost Index were weighted by the proportion of HCHS expenditure on each. Following a review of departmental analytical products, the HSCI index, and thus the HCHS inflator, was discontinued.

Last year, in collaboration with the DHSC, we constructed a new Health Services (HS) index to ensure that we could present a relevant inflation index in this volume. This has been superseded by the NHS Cost Inflation Index (NHSCII), to be used this year to uprate health services. See Section V, 15.3 for further details.

Local authority overheads

We are aware that the information we have drawn on to estimate local authority overheads is now ten years old and would normally be withdrawn from the volume. However, given that overheads are key to the social care unit costs, in the absence of any new sources, we have continued to use the same work. We urge our readers to contact us if they know of any recent information we could use, or from which this information can be gleaned. Additionally, if any local authorities are willing to work with us to estimate council overheads, we would be grateful if they could get in touch.

Blogs and other useful information

This year, three new Unit Costs blogs have been published on the PSSRU website (https://www.pssru.ac.uk/blog/category/unit-costs/)

New and innovative children's services in UCR 2018 (Amanda Burns),

The unit costs of professionals – free database now available (Unit Costs' team),

101 uses for a *Unit Costs of Health & Social Care* volume (Amanda Burns)

What have we taken out?

To comply with the rule of removing schema for which the original data are more than ten years old, this year we have withdrawn the following schema. Although they will no longer be updated, Section V of the volume contains the list of services removed since 2006, which can be downloaded online.

- 4.3 Residential care homes for adults requiring learning disability support
- 6.6 End-of-life care at home for children
- 6.9 Decision-making panels
- 6.10 Costs of reunification
- 6.11 Short-break provision for disabled children and their families
- 8.1 Health care support received by people with mental health problems, older people (over 75) and other service users.
- 11.10 Re-ablement services

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