

# State of the Art in Costing Methods

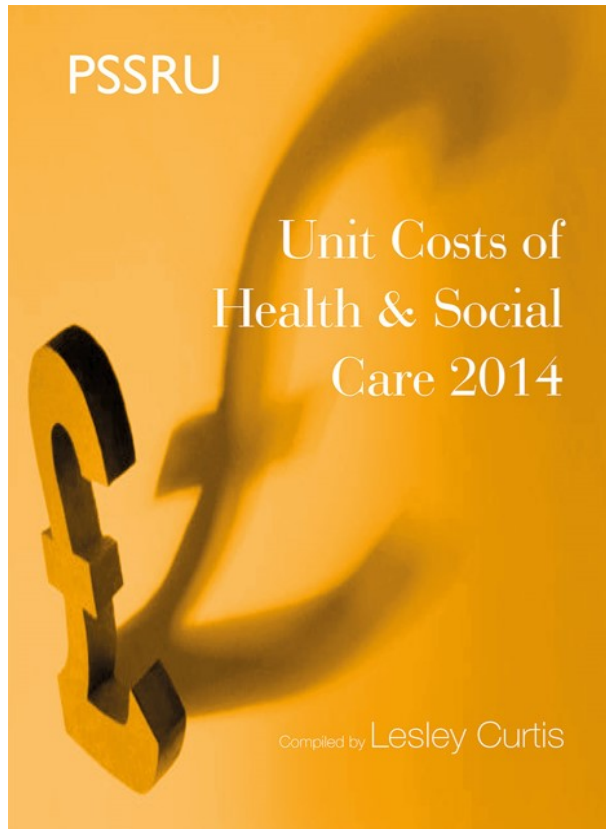
## Unit Costs of Health & Social Care Lesley Curtis

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THE LONDON SCHOOL  
OF ECONOMICS AND  
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**PSSRU**  
Personal Social Services Research Unit



1. Aims
2. What is included?
3. Methods
  - a. Examples of :
    - i) Multi-sources (service level)
    - ii) Care -packages
    - iii) Reference costs
  - b. Back-office
4. What is the report used for?
5. Future work

# Aims

- Commissioned in 1992 by DH to provide unit costs that are :
  - nationally-applicable (England only) with weighting
  - Inclusive
  - Up to date
- To use 'long run marginal opportunity cost' approach
- To produce bottom-up costs where possible which the user can substitute to suit their own circumstances.
- Sources of information are fully referenced.
- Carry out primary research where no information publicly available.

## Example 1: multi-source data

- Sections 2-4 of our report provide costs at a service level using several sources. Informs patient level costs.
- Salaries, oncosts (employers contribution to superannuation and national insurance), overheads (direct and indirect) plus capital (building and land costs).
- We always provide a unit cost per working hour. When possible we provide cost per patient related hour.

# Multi-source data - community nurse

Costs and unit estimation	2013/2014 value	Notes
Wages/salary	£31,943 per year	Based on the mean FTE basic salary for Agenda for Change Band 6
Salary on-costs	£7,818 per year	Employer's NI plus 14% of salary for employer's superannuation contrib.
Overheads: management, administration & estates staff	£7,677 per year	Using NHS (England) Summarised Accounts: 19.31% direct care salary costs
Overheads: Non-staff	£16,688 per year	Using NHS (England) Summarised Accounts: 41.97% direct care salary costs
Overheads: Capital	£3,687 per year	New-build and land for community health facilities, annuitised over 60 years at a discount rate of 3.5%. Add on 'extra' costs (fees, charges, searches etc.).

# Multi-source data - community nurse: identify activities/unit

Costs and unit estimation	2013/2014 value	Notes
Working time	42 weeks per year 37.5 hrs per week	Unit costs are based on 1,575 hours per year: 210 working days minus sickness absence and training/study days as reported for all NHS staff groups.
Ratio of direct to indirect time:		
Patient-related work (incl. direct care, care planning etc, travelling)	1:0.33	<b>Community nurses spend 43% of their time on direct care.</b> Then: 18% on care planning, assessment and coordination; 19% on administrative tasks; 5% on management; 14% travelling; and 1% on other duties.

**Unit Costs 2013/2014**

**£43 per hour, £57 per hour of patient-related work**

## Example 2: care packages

Mrs E was an 82 year old woman who was married and lived with her husband and another relative in her own home. Mrs E suffered from dementia and needed help with nine activities of daily living.

Services	Average weekly costs	Level of service	Description
Social care			
Home care	£1,111	30 hrs per week	Local authority-organised home care. (UCR).
Health care			
Community nurse	£19	20 mins	One community nurse visit a week. (UCR)
GP	£11	11.7 mins	Visits estimated at once every four weeks (UCR)
Other costs			
Accommodation	£86		The national average weekly gross rent (two-bedroom house/social housing sector). (RENTRIGHT).
Living expenses	£213		Living expenses (Family Expenditure Survey)
Total Cost	£1,440		

## **Example 3: NHS Reference Costs – single source routinely collected data**

- Costs of treatments and procedures delivered to NHS patients from NHS resources. (Costs per bed-day; outpatient attendance; session etc.).
- Include all costs to the NHS
- Some Trusts apportion overheads across Healthcare Resource Groups and costs are top down.
- More and more Trusts now use patient level costing (PLICS).
- Data used to inform the national tariff.



# Reference Costs

In the UCR we often provide an average weighted cost per speciality group

National Schedule of Reference Costs - Year 2012-13 - NHS trusts and NHS foundation trusts						
Community Health Services - Medical and Dental - Community Paediatrics, face to face						
Currency Code	Currency Description	Attendances	National Average Unit Cost	Lower Quartile Unit Cost	Upper Quartile Unit Cost	Data Submissions
M02FCPH	Child Public Health	52,609	249	165	333	17
M02FE	Statutory Work for Education	13,210	431	332	435	24
M02FO	Other	333,301	310	189	379	84
M02FS	Safeguarding	16,187	294	72	396	24
M02FSS	Statutory Work for Social Services	10,867	466	137	608	24
	Total attendances	426,174				
	Costs weighted by the number of attendances		310	185	382	

# Back-office methods

- Staffing
- External validation from a working group
- Keeping info. up to date - review literature/feedback from users/secondary sources/specialist departments eg. Centre for Child and Family Research.
- Information updated using inflators if no recent sources available.
- Stored on multi-linked spreadsheet/info. transferred to workbooks for printing.

# The uses the Unit Costs report

**Many uses – separate sections downloaded nearly 32,000 with 19,000 full report downloads.**

Used :

- To inform policy/impact assessments/spending reviews.
- Benchmark prices when purchasing services/fixing personal budgets.
- For economic evaluations - cost effectiveness studies
- (Cited in 68% of English economic evaluations).
- When researching disease profiles/BigData – identifying costly patients for public health interventions and most cost effective treatment.

# Future work

- Aim to take a societal perspective when data is available. Other costs which we hope to include in the future are :
  - Environmental costs such as carbon and other greenhouse gas emissions.
  - Indirect costs to patients – travel/loss of productivity (already included in some care packages).
  - Informal care costs. We have included methods of calculating these in previous articles.