

# Unit Costs of Health and Social Care

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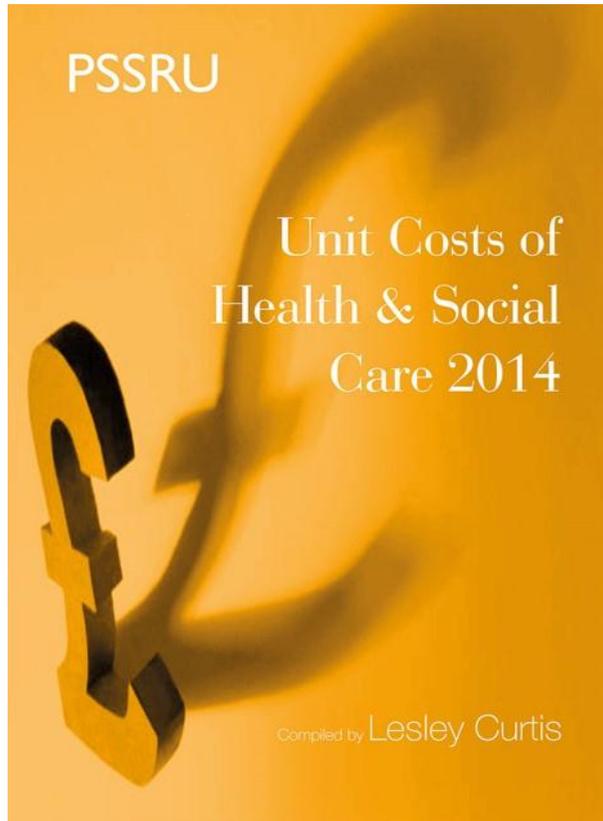
**State of the Art in Costing Methods  
Edmonton, Canada (21<sup>st</sup> and 22<sup>nd</sup> January)**

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**PSSRU**  
Personal Social Services Research Unit



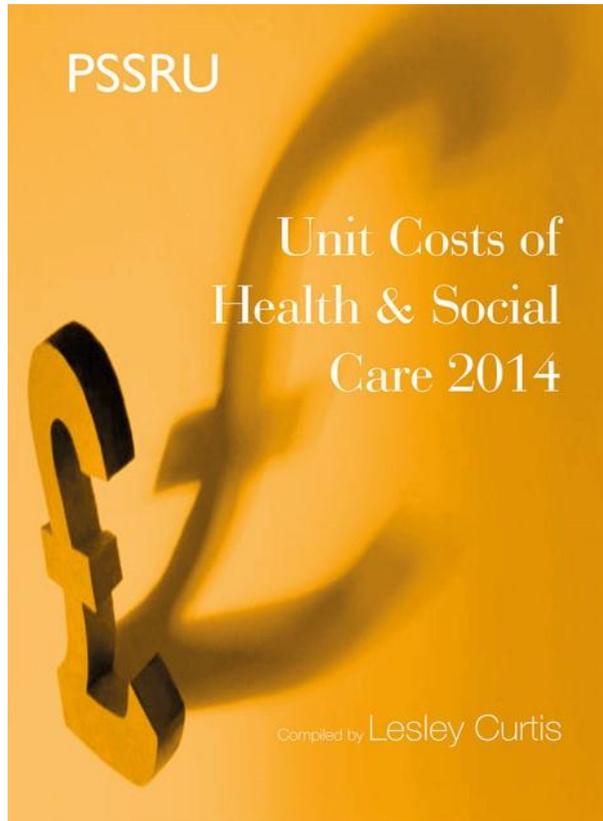
1. Aims
2. What is included?
3. Methods
  - a. Examples of:
    - i) Multi-sources
    - ii) Care-packages
    - iii) Reference costs
  - b. Back-office
4. How are the costs used?
5. Future work

# Aims

- Commissioned since 1992 by DH to provide unit costs that are nationally-applicable (England only). Provides weighting (where possible) for London.
- 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.

The publication includes:

- a) Guest editorial/articles
- b) Section 1 – costs of facilities, client level, hospital costs, care packages
- c) Sections 2 to 4 – costs of professionals/teams which can be used across all client groups
- d) Miscellaneous



# Example 1: multi-source data

- Sections 2-4 of our report provide costs for professionals/teams of professionals used in all client groups.
- Includes 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 of 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 of estimation  | 2013/2014 value                        | Notes  |
|---|--|--|
| Working time  | 42 weeks per year<br>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.  |
| <b>Ratio of direct to indirect time:</b><br>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><br>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 working 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  |
|--------------------|----------------------|------------------|--|
| <b>Social care</b> |                      |                  |  |
| Home care          | £1,111               | 30 hrs per week  | Local authority-organised home care. (UCR).  |
| <b>Health care</b> |                      |                  |  |
| 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)  |
| <b>Other costs</b> |                      |                  |  |
| Accommodation      | £86                  |                  | The national average weekly gross rent (two-bedroom house/social housing sector). (RENTRIGHT). |
| Living expenses    | £213                 |                  | Living expenses (Family Expenditure Survey)  |
| <b>Total Cost</b>  | <b>£1,440</b>        |                  |  |

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

- Costs of treatments and procedures delivered to NHS patients from NHS resources. Includes all costs per bed-day; outpatient attendance; session etc.).
- Some Trusts use a “top down” approach to allocate costs to clinically similar groups of patients.
- More and more Trusts are now using patient level costing (PLICS).
- Data used to inform the national tariff.

# Reference Costs

We often provide an average weighted cost per speciality group. See <https://www.gov.uk/government/publications/nhs-reference-costs-2012-to-2013/> for full list of reference costs available.

|   | National average | Lower quartile | Upper quartile |
|---|------------------|----------------|----------------|
| <b>Elective/non elective stays, average weighted cost per episode</b> |                  |                |                |
| Elective inpatient stays  | £3,403           | £2,568         | £4,013         |
| Non-elective inpatient stays (long stays)                             | £2,716           | £2,029         | £3,197         |
| Non-elective inpatient stays (short stays)                            | £611             | £408           | £726           |
| <b>Day cases (finished consultant episodes)</b>                       |                  |                |                |
| Weighted average of all stays   | £701             | £503           | £835           |
| <b>Day care facilities (average cost per patient day)</b>             |                  |                |                |
| Stroke patients   | £208             | £153           | £268           |
| Elderly patients  | £157             | £76            | £208           |
| Other patients  | £157             | £94            | £214           |
| <b>Outpatient procedures</b>  |                  |                |                |
| Weighted average of all outpatient attendances                        | £109             | NA             | NA             |

# Back-office methods

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

# How are the costs used?

Many uses – full report (2013) downloaded 19,000 times and individual sections 32,000 times.

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 – identifying costly patients for public health interventions and most cost effective treatment.

# Future work

- 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
  - Informal care costs
  - Time use survey ongoing

## Further information

For the 2014 report, please visit: <http://www.pssru.ac.uk/project-pages/unit-costs/2014/>

Past reports: <http://www.pssru.ac.uk/project-pages/unit-costs/>

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