

Personal Social Services Pay and Prices Index

*Jennifer Heigham*¹

The Department of Health (DH) annually produces a Personal Social Services (PSS) Pay and Prices (P&P) Index, which is used to inflate or deflate expenditure on social services as necessary. The DH has just completed a review of the index. This review introduced a capital element and updated the weights accorded to the different cost elements. The 2003/04 index has been calculated, and the 2002/03 index recalculated, on this revised basis. An estimate for the projected index in 2004/05, based on the new methodology, has also been produced. This article sets out the revised methodology and presents the PSS P&P index including the projected value for 2004/05.

For different purposes, different parts of the PSS sector need to be included. Four indices have been produced.

Index 1: All sectors for all clients i.e. covering both LA and independent provision and including those working with both adults and children

Index 2: All sectors for those working with adult clients only

Index 3: LA sector for all clients

Index 4: LA sector for adult clients only.

Index of Social Care Pay Costs

The pay component of the PSS P&P index is calculated using data on rates of pay change for each occupation group in the PSS sector from the Annual Survey of Hours and Earnings (ASHE), published by ONS. Previously the New Earnings Survey (NES) was used, but the ASHE replaced the NES in 2004².

The occupation groups used for the analysis are:

- 1 Standards and Quality Analytical Team, Department of Health, London. Thanks to Thomas Allan, Raphael Wittenberg and Iain Long for their contributions to the work and article.
- 2 The primary differences are that ASHE estimates are weighted by calibration to Labour Force Survey estimates of numbers of people in jobs; the ASHE sample includes employees in businesses outside the PAYE system and employees who changed jobs after sample identification; and imputation for item non-response has been introduced.

- Administrative, Professional, Technical and Clerical (APT&C) – this is a collective LA pay agreement group used to represent average changes in managers’ pay
- Social workers
- Occupational therapists (OTs)
- Nurses
- Care assistants and home carers - this group is used to represent average pay changes for care staff, support staff and other staff.

Table 1 sets out the average change in pay for each occupation group. The trend in national average earnings for the same period is also shown. To put the figures into context.

An aggregate PSS pay index was calculated by weighting these pay changes by the occupation group’s share of the total PSS paybill. This was carried out using DH estimates of the proportion of whole time equivalent PSS staff in each group and 2004 ASHE data on mean pay for full-time employees in each group. Sensitivity tests on the weighting of the occupation groups suggest that the index is reasonably robust to changes in the estimates of the proportions of staff in each occupational group.

Table 1 Average change in pay by occupation group

| ASHE categories | 2002/3 % | 2003/4 % |
|---------------------------|-------------|-------------|
| APT&C | 5.8 | 2.9 |
| Social Workers | 4.2 | 4.2 |
| Nurses | 1.2 | 4.5 |
| Occupational therapists | 1.9 | 3.8 |
| Care Assistants | 7.8 | 4.4 |
| National Average Earnings | 3.2 | 4.1 |

Source: ONS Annual Survey of Hours and Earnings (ASHE)

Table 2 shows the weighted average proportion of the paybill for each occupation group. Pay changes for 2004/05 were projected using an average of the deflated pay changes in past years. This assumes that pay increases next year will be in line with the previous trend. The method used was to calculate the pay changes in each year deflated by the respective GDP deflator, take a three-year average of these real pay changes, and then inflate the result by the 2004/05 GDP deflator to give the projected nominal pay change.

Table 2 Summary of staff share of paybill

| ASHE categories | Index 1 | Index 2 | Index 3 | Index 4 |
|-----------------|-------------------------------|-------------------------------|-----------------------------|-----------------------------|
| | All sectors, all clients % | All sectors, adults only % | LA sector, all clients % | LA sector, adults only % |
| APT&C | 16 | 16 | 16 | 17 |
| Social Workers | 9 | 4 | 25 | 15 |
| Nurses | 7 | 8 | 0 | 0 |
| OTs | <1 | <1 | 1 | 1 |
| Care Assistants | 68 | 71 | 58 | 67 |

Table 3 sets out the PSS weighted average pay increase and the projected increase for 2004/05 for the four different cuts of social service provision.

Table 3 Weighted average PSS pay increases and projections

| Weighted average PSS salary change | | 2002/03 | 2003/04 | 2004/05 |
|------------------------------------|--------------------------|-----------|-----------|----------|
| | | ASHE % | ASHE % | (E) % |
| Index 1 | All sectors, all clients | 6.7 | 4.2 | 4.6 |
| Index 2 | All sectors, adults only | 6.8 | 4.2 | 4.7 |
| Index 3 | LA sector, all clients | 6.5 | 4.1 | 4.5 |
| Index 4 | LA sector, adults only | 6.8 | 4.1 | 4.6 |

Source: ONS Annual Survey of Hours and Earnings (ASHE)

Note: Three-year average for projections calculated using New Earnings Survey (NES) in 2002¹

Capital

The revised index includes a separate capital element. In the past, capital was treated as part of the 'prices' component of the PSS P&P index and therefore assumed to increase at the rate of the GDP deflator. The index used is the Tender Price Index for Public Sector Building (non-housing) (PUBSEC), compiled by the Department of Trade and Industry, shown in table 4.

Table 4 The PUBSEC Index

| 1995=100 | Capital | |
|--------------------|---------|------|
| 2002 | 136 | 4.6% |
| 2003 | 145 | 6.6% |
| 2004 (Provisional) | 155 | 6.9% |

Source: DTI (2005) PUBSEC Index

Non-staff revenue

As in previous years, Her Majesty's Treasury's GDP deflator is used to deflate prices for non-staff revenue spend in the sector. This index is a measure of general inflation in the domestic economy.

Weights of the different components

The weights on the three components of expenditure have been updated to reflect current spend and allow the inclusion of the separate capital index. In previous years, the split was between labour costs (70 per cent) and other (30 per cent), based on financial returns in the 1990s.

To calculate these weights, the breakdown of expenditure between the three components was estimated for each of the main sub-categories of services for the different client groups. These estimates were guided by information from the 2004 Unit Costs of Health and Social Care Report and the 2004 Laing and Buisson report 'Calculating a Fair Price for Care'.

¹ NES UK data on pay changes in 2001/02 are used as ASHE data are discontinuous between 2001 and 2002, due to the change in occupation group classification codes in 2002. This discontinuity does not arise in NES as these data were produced on both codes in 2002.

For many services, data on the split of expenditure between the three components were not available. In these circumstances, assumptions had to be made, for example using data on other client groups or knowledge of the sector from other sources. For approximately 10 per cent of adult's services and 33 per cent of children's services, where this was not possible, the services were excluded from the calculations. Expenditure in these areas, therefore, was implicitly assumed to be split in accordance with the average of all other services for adults or children as appropriate.

An overall breakdown of expenditure between the three components was estimated by weighting the cost component breakdowns in each sub-category by PSS EX1 data on expenditure in each sub-category as a proportion of total PSS expenditure. The estimated cost component weighting for each of the relevant client groups and sectors is shown in table 5.

Table 5 The cost component weightings

| | | Pay % | Revenue % | Capital % |
|---------|--------------------------|----------|--------------|--------------|
| Index 1 | All sectors, all clients | 78 | 10 | 12 |
| Index 2 | All sectors, adults only | 74 | 12 | 14 |
| Index 3 | LA sector, all clients | 89 | 6 | 5 |
| Index 4 | LA sector, adults only | 88 | 7 | 5 |

The revised PSS Pay and Prices Index

The four indices, covering different parts of the PSS sector, are presented in table 6 below.

Table 6 The PSS P&P Indices

| | Index 1 | Index 2 | Index 3 | Index 4 |
|-------------|-------------------------------|-------------------------------|-----------------------------|-----------------------------|
| | All sectors, all clients % | All sectors, adults only % | LA sector, all clients % | LA sector, adults only % |
| 2002/03 | 6.1 | 6.0 | 6.2 | 6.5 |
| 2003/04 | 4.3 | 4.3 | 4.1 | 4.1 |
| 2004/05 (E) | 4.6 | 4.7 | 4.5 | 4.6 |

Conclusion

Inflators are widely used both in Government and elsewhere in order to adjust cost and price inflation. As the editorial in this volume points out it is important that these are as accurate as possible. The more detailed breakdown of inflators here represents an important improvement in the accuracy of estimates.

References

- Department of Health (2005) *Personal Social Services Expenditure Return (PSS EX1) 2003/04*, http://www.publications.doh.gov.uk/public/pss_stat.htm.
- Department for Trade and Industry (2005) *Quarterly Building Price and Cost Indices March 2005*, HMSO, Norwich.
- HM Treasury (2005) *GDP deflator* (last updated 30/06/2005), http://www.hm-treasury.gov.uk/economic_data_and_tools/gdp_deflators/data_gdp_fig.cfm.
- Laing, W. (2004) *Calculating a Fair Price for Care*, Laing & Buisson, Bristol.

Netten, A. & Curtis, L. (2004) *Unit Costs of Health and Social Care 2004*, Personal Social Services Research Unit, University of Kent, Canterbury.

Office for National Statistics (2001-2004) *Annual Survey of Hours and Earnings*, <http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=13101>.

Office for National Statistics (2002) *New Earnings Survey Streamlined Analyses UK 2002*, http://www.statistics.gov.uk/downloads/theme_labour/NES2002_UK/NES2002_United_Kingdom_Streamlined_analyses.pdf.