## Appendix: The Effect of the New Quality Adjustment Methodology for Nursing Home Price Indexes

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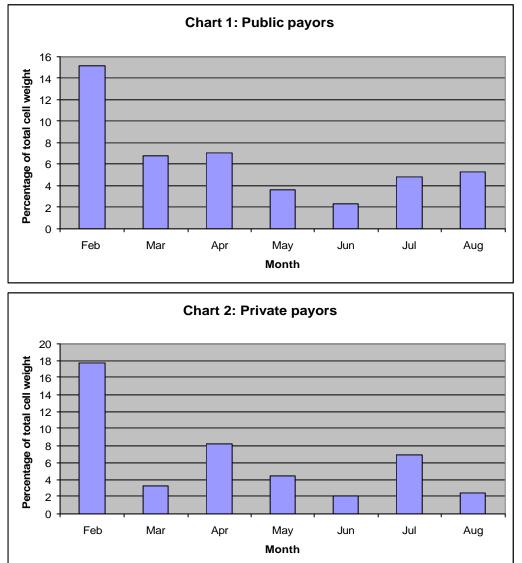
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\* The views expressed are those of the authors and do not reflect the policies of the U.S. Bureau of Labor Statistics or the views of other BLS staff members

Last year at the 2003 Voorburg Conference, a paper titled *A New Quality Adjustment Methodology for the Nursing Home Price Index* was presented. This update outlines the effects of the use of this methodology which was officially implemented in January 2004. The methodology provides for the adjustment of prices based upon changes in nurse staffing levels as reported by the Centers for Medicare and Medicaid Services (CMS). Please note that the CMS database did not include any staffing level changes in January for establishments sampled in NAICS 623110. For this reason, January figures are not included in any of the charts.

Chart 1 and Chart 2 depict the percentage of the cell's weight that was subject to quality adjustment in the given month. For both public and private payors, the first eight months of quality adjustments included staffing level changes for about 45% of the establishments (by weight) in the sample.



Charts 3 and 4 depict the amount of aggregate change on items that were subject to quality adjustment. The aggregate change is the amount of change in the price relative multiplied by the item weight for each item in a particular cell (for example, the public payors cell), and then summed over all items in that cell.

The chart should be read as follows: the February value of approximately 1.0% in the public payors cell means that the price relative multiplied by the item weight summed over allitems in the public payors cell increased by about one percent. This does not mean that the PPI's index value increased by one percent because of quality adjustment- it means that, on average, items that were subject to quality adjustment were increased by one percent due to staffing level changes. These charts only include data from respondents that have already returned repricing forms in the month where staffing level changes have been reported. Those respondents that report every other month or every quarter would not be included in these charts in the latter months (the PPI has a four month revision policy).

While the magnitudes of the changes are small, the direction of the change is of interest. The majority of the movements in both cells illustrate increased staffing levels (the index decreases when staffing is increased and the transaction price is constant). Our original assumption in the paper presented in 2003 is nurse staffing levels were increasing is illustrated for the most part. It also is in accordance with the widely held view that health care related inflation is overstated because it does not take quality into account. As more quality related data is released for health care industries, the PPI will research and implement quality adjustment methodologies where possible.

