**Care of the Elderly Excess Cost Adjustment – Further Impact Assessment**

**Context**

1. During the formula run for the 2016/17 target shares, excessively large changes were observed in indices for the excess cost adjustment of the Care of the Elderly Care programme (COTE), in some urban-rural categories. These large changes occurred because the underlying activity levels were quite low and modest changes in the more recent data had a disproportionate effect on the indices. A temporary solution, implemented at that time, was to retain the previous excess cost indices for the affected part of the formula. Subsequent analysis determined that a more permanent solution would be to merge the excess cost adjustment of the Acute and COTE care programmes, in effect acknowledging that the COTE programme had become too small (in some areas) to yield stable excess cost indices when calculated independently.
2. This change to the formula structure was recommended to TAGRA in the previous paper, *Stabilising the Unavoidable Excess Costs component of NRAC (TAGRA (2018)02)*, presented to the last TAGRA meeting. TAGRA agreed to implement the change.
3. However, during discussion, members queried observed changes to excess cost indices for the Mental Health & Learning Difficulties (MHLD) and Maternity care programmes. It was unclear if the changes in these indices should be attributed to the COTE change or simply to the updating of the underlying excess cost data. TAGRA therefore asked for further analysis to determine whether the change in the COTE was affecting indices in MHLD and Maternity care programmes.
4. To provide a more precise impact assessment the analysis was repeated using the latest underlying cost data (from the run for 2021/22), for both the merged and independent Acute and COTE excess cost indices. The results are shown below. The subsequent section sets out the structure of the excess cost adjustment by care programme to illustrate the independence of the indices for the different care programmes.

**Impact assessment using unchanging cost data**

1. Table 1 shows the Excess Costs indices and the Overall HCHS indices from the latest NRAC publication (NRAC 2021/22). These were calculated with the excess cost adjustment calculated for the combined Acute and COTE care programmes.

Table 1: The Excess Cost Index from 2019 publication, NRAC 2021/22, at Health Board level. Based on data from 2015/16, 2016/17 and 2017/18.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Health Board** | **Acute Excess Costs Index** | **COTE Excess Costs Index** | **MHLD Excess Costs Index** | **Maternity Excess Costs Index** | **HCHS Excess Costs Index** | **HCHS Overall Index** | **NRAC HCHS Share** |
| Ayrshire & Arran | 0.985 | 0.985 | 1.019 | 0.989 | 0.989 | 1.094 | **7.33%** |
| Borders | 0.992 | 0.992 | 1.005 | 1.001 | 1.007 | 1.016 | **2.14%** |
| Fife | 0.983 | 0.982 | 1.012 | 0.967 | 0.981 | 1.000 | **6.81%** |
| Greater Glasgow & Clyde | 1.004 | 1.004 | 0.965 | 1.000 | 0.989 | 1.024 | **22.08%** |
| Highland | 1.036 | 1.038 | 1.155 | 1.111 | 1.105 | 1.135 | **6.66%** |
| Lanarkshire | 0.983 | 0.983 | 1.010 | 0.970 | 0.981 | 1.011 | **12.18%** |
| Grampian | 0.999 | 0.998 | 0.998 | 1.015 | 1.000 | 0.901 | **9.81%** |
| Orkney | 1.235 | 1.235 | 1.078 | 1.111 | 1.233 | 1.285 | **0.52%** |
| Lothian | 0.999 | 0.999 | 0.978 | 0.993 | 0.987 | 0.900 | **15.04%** |
| Tayside | 0.998 | 0.997 | 0.989 | 1.002 | 0.997 | 1.026 | **7.84%** |
| Forth Valley | 0.982 | 0.981 | 1.015 | 0.970 | 0.983 | 0.962 | **5.43%** |
| Western Isles | 1.232 | 1.231 | 1.074 | 1.108 | 1.260 | 1.418 | **0.68%** |
| Dumfries & Galloway | 0.991 | 0.990 | 1.011 | 1.029 | 1.012 | 1.105 | **2.98%** |
| Shetland | 1.230 | 1.230 | 1.073 | 1.107 | 1.240 | 1.187 | **0.50%** |

1. The relevant Excess Cost care programme indices and the consequential impact on the total HCHS Excess Costs and Overall HCHS indices were re-calculated using the previous methodology, where the Acute and COTE activities were estimated separated.
2. As can be seen from Tables 1 and 2, while there is a clear difference in the index figures for both the Acute and the COTE programmes, there is no change in the indices for either MHLD or Maternity, when the Acute and COTE are merged together.

Table 2: The Excess Cost Index from 2019 publication, NRAC 2021/22, at Health Board level (Care of the Elderly highlighted in grey). Based on data from 2015/16, 2016/17 and 2017/18.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Health Board** | **Acute Excess Costs Index** | **COTE Excess Costs Index** | **MHLD Excess Costs Index** | **Maternity Excess Costs Index** | **HCHS Excess Costs Index** | **HCHS Overall Index** | **NRAC HCHS Share** |
| Ayrshire & Arran | 0.984 | 1.026 | 1.019 | 0.989 | 0.989 | 1.094 | **7.34%** |
| Borders | 0.992 | 1.036 | 1.005 | 1.001 | 1.007 | 1.015 | **2.14%** |
| Fife | 0.983 | 0.990 | 1.012 | 0.967 | 0.981 | 1.000 | **6.81%** |
| Greater Glasgow & Clyde | 1.005 | 0.978 | 0.965 | 1.000 | 0.989 | 1.024 | **22.10%** |
| Highland | 1.036 | 1.020 | 1.155 | 1.111 | 1.103 | 1.132 | **6.64%** |
| Lanarkshire | 0.983 | 0.992 | 1.010 | 0.970 | 0.982 | 1.011 | **12.19%** |
| Grampian | 0.999 | 1.040 | 0.989 | 1.015 | 1.000 | 0.901 | **9.81%** |
| Orkney | 1.236 | 0.663 | 1.078 | 1.111 | 1.217 | 1.269 | **0.51%** |
| Lothian | 0.999 | 0.992 | 0.978 | 0.993 | 0.988 | 0.900 | **15.05%** |
| Tayside | 0.998 | 1.019 | 0.989 | 1.002 | 0.997 | 1.027 | **7.84%** |
| Forth Valley | 0.982 | 0.995 | 1.015 | 0.970 | 0.984 | 0.963 | **5.43%** |
| Western Isles | 1.232 | 0.661 | 1.074 | 1.108 | 1.239 | 1.395 | **0.67%** |
| Dumfries & Galloway | 0.990 | 1.090 | 1.011 | 1.029 | 1.011 | 1.105 | **2.98%** |
| Shetland | 1.231 | 0.661 | 1.073 | 1.107 | 1.224 | 1.172 | **0.49%** |

**Outline of the methodology for MHLD/Maternity care programmes**

1. The inpatient and outpatient activity for the MHLD or Maternity care programmes is extracted from the SMR records and matched with costs, identified in the Base Year Costs Book publication.
2. For MHLD, SMR04 is used for inpatient activity and SMR02 for the Inpatient Maternity activity. Selected SMR00 data is used for both programmes Outpatient activity. This activity is matched to a cost through matching with the Costs Book.
3. From this ‘matched activity’ the ratio of Local costs to the expected costs is calculated at datazone level: the SDIA uplift is applied and from this the datazone and Health Board HCHS indices are finalised**.**
4. Below, is an outline of the methodology and data used in calculating the both the published and the analysis of the Mental Health and Learning Disabilities indices.



**Conclusion**

1. Merging the Acute and the COTE care programmes, does not have a direct effect on either the Mental Health and Learning Disabilities or Maternity care programme indices for excess costs. This is because the activities for these two care programmes are extracted from separate datamarts, SMR04 and SMR02, which are not affected by the merger of Acute and COTE.