NRAC GP out of hours adjustment - update

# For attention of TAGRA (November 2023)

# Purpose

The main purpose of this paper is to provide a summary of how the GP out of hours (OoH) adjustment is currently calculated and incorporated into the NRAC Formula and to subsequently raise two points of discussion for the consideration of TAGRA:

1. The Scottish Allocation Formula (SAF) data used to calculate the GP-OoH adjustment cannot be updated beyond 2017/18. The SAF was replaced by the Scottish Workload Formula (SWF) which does not include the remote and rurality component which is required for the GP-OoH adjustment in the NRAC Formula. This presents a risk that using out-of-date SAF data will not reflect changes that may have occurred in the intervening years in terms of the geographical distribution of need for GP-OoH services.
2. Review proposed changes to the methodology used for calculating the GP-OoH adjustment for the NRAC target shares for Health and Social Care Partnerships (HSCPs). These changes would see a specific OoH-adjustment produced for each HSCP, rather than using the board-level adjustment where the HSCP is located, and would be used to calculate HSCP target shares from 2024/25 onwards.

Detailed information and accompanying analysis are presented below to support discussion of these points.

## Calculation of the GP-OoH adjustment in the NRAC Formula

In 2011, the Remote and Rural subgroup[[1]](#footnote-2) of TAGRA was established with a remit to recommend changes to the excess cost adjustment of the NRAC formula. Their work focused on three main areas, one of which was to develop an adjustment which explicitly recognised GP-OoH services and reflected the lack of economies of scale in delivering those services in rural areas. Lack of activity and unit cost data precluded the full integration of OoH in the formula, but the subgroup concluded that the Scottish Allocation Formula (SAF), which was used at the time to allocate funds for GP services, could be adapted to provide this adjustment.

Like the NRAC formula, the SAF was a weighted capitation formula that was calculated at GP practice level, the starting point being the practice population, to which a series of adjustments (weightings) were made. The final adjustment made use of three factors which had proved predictive of the observed variation in GP service costs attributable to 'rurality and remoteness' - see Table 1. These were calculated for each practice and combined into an indicator of need, which was then used to further weight the practice population. An alternative set of weights for the formula components had been estimated for a review of the SAF and these weights were found to produce a distribution which mapped the pattern of observed OoH expenditure. The subgroup therefore recommended applying these weights to each factor - and in effect more weight compared to the original SAF's adjustment for 'rurality and remoteness' - meaning the adapted SAF could be used effectively as a component within the NRAC formula to predict how the need for GP-OoH services would be geographically distributed in a particular year.

Table 1: SAF 'Remote and Rural' indicator of need

|  |  |  |
| --- | --- | --- |
|  | Weights used in original SAF  | SAF review weights adapted for NRAC GP-OoH adjustment  |
| Constant | 54.542 | 47.612 |
| Density - hectares per resident | 1.881 | 2.539 |
| Sparsity - population in settlements <500 people  | 0.140 | 1.275 |
| Patients attracting road mileage payments  | 0.109 | 0.546 |

The adapted SAF was first incorporated into the NRAC formula when it was used to look at the distribution of healthcare need in 2014/15. A weighted population was calculated for each practice and then populations were aggregated to NHS Board level, based on the practice location. Percentage shares were then calculated, reflecting how the need for GP-OoH services was distributed across boards. These GP-OoH shares were combined with the NRAC share (covering all other NRAC calculations) using a weighting, based on the expected total cost of GP-OoH services as a proportion of the total budget.

The total amount that boards were expected to need to pay for GP-OoH services was calculated as total OoH expenditure reported in the Costs Book minus the retained element of primary care funding (i.e. 6% of the global sum). The global sum is the payment made to practices for delivering GP services. Under the provisions of the General Medical Services (GMS) contract at the time, a practice’s payment was reduced by 6% if they opted out of providing OoH services. This sum was then reallocated to that practice's NHS Board and that Board became responsible for providing a substitute OoH service to the practice population. However, when compared to OoH expenditure reported in the Costs Book, the 6% of global sum reallocated to Boards was insufficient to meet their costs of providing this service and so the shortfall was funded out of their general allocation.

Consequently the additional cost for NHS Boards delivering OoH services was calculated as the total OoH expenditure from the Costs Book minus 6% of global sum. This figure divided by the total budget for the NHS Boards produces the weight (approximately 0.7%) given to GP-OoH shares in the NRAC formula.

## Current data available to update GP-OoH shares

A new GMS contract was introduced in 2018/19 alongside the Scottish Workload Formula (SWF), which replaced the SAF. The SWF incorporated major changes to the calculation of global sum payments, including the removal of the remote and rurality adjustment, making it unsuitable to act as a replacement for SAF as a means for calculating the GP-OoH adjustment in the NRAC Formula. Until suitable replacement data or a replacement methodology can be identified, the GP-OoH adjustment in future NRAC runs (2025/26 onwards) will be based on 2017/18 SAF data. This presents a risk that using out-of-date SAF data will not reflect changes that may have occurred in the intervening years in terms of the geographical distribution of need for GP-OoH services.

With the aim of assessing this risk, Table 2 below shows how the SAF-based GP-OoH shares for NHS Boards changed over the five-year period ending in 2017/18. Whilst shares for all NHS Boards experienced some change, the most significant changes occurred in NHS Greater Glasgow & Clyde (-4.7%) and NHS Lanarkshire (11.6%). However, the latter was due largely due to boundary changes that came into effect from 1st April 2014 and which led to a decrease in the population in NHS Greater Glasgow and Clyde and an increase in the population in NHS Lanarkshire.

Table 3 uses the last run of the NRAC Formula, which looked at healthcare need in 2024/25, to test the impact of using the two sets of GP-OoH shares shown in Table 2 to create final NRAC target shares for NHS Boards. This shows that, despite the level of change to the GP-OoH shares over time, there is very little impact on the NRAC target shares, with no change to two decimal places.

As mentioned, until replacement data or a replacement methodology can be found, the GP-OoH adjustment will continue to rely on 2017/18 SAF data. However, while the current inability to update the GP-OoH adjustment is unsatisfactory, this analysis highlights that there would need to be very significant changes to the geographical distribution of the need for GP-OoH services before using the 2017/18 based adjustment was significantly misrepresentative.

Table 2: GP-OoH shares (using 2013/14 SAF data compared to 2017/18)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NHS Board | GP-OoH shares (2013/14) | GP-OoH shares (2017/18) | Percentage point difference (2017/18 minus 2013/14) | Percentage (%) difference (2017/18 minus 2013/14) |
| Ayrshire & Arran | 6.879% | 6.761% | -0.118 | -1.708% |
| Borders | 3.056% | 3.021% | -0.035 | -1.143% |
| Dumfries & Galloway | 4.628% | 4.537% | -0.092 | -1.977% |
| Fife | 6.051% | 5.976% | -0.075 | -1.245% |
| Forth Valley | 5.081% | 5.101% | 0.020 | 0.385% |
| Greater Glasgow & Clyde | 18.521% | 17.657% | -0.865 | -4.668% |
| Grampian | 12.226% | 12.159% | -0.067 | -0.544% |
| Highland | 11.033% | 10.959% | -0.074 | -0.671% |
| Lanarkshire | 9.026% | 10.072% | 1.046 | 11.587% |
| Lothian | 12.260% | 12.630% | 0.369 | 3.014% |
| Orkney | 0.787% | 0.794% | 0.007 | 0.848% |
| Shetland | 0.932% | 0.904% | -0.028 | -3.057% |
| Tayside | 8.183% | 8.121% | -0.062 | -0.757% |
| Western Isles | 1.335% | 1.309% | -0.027 | -2.000% |

Table 3: Final target NRAC shares for NHS Boards for 2024/25 (calculated using 2013/14 and 2017/18 GP-OoH shares)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NHS Board | Final target share - using 2013/14 GP-OoH shares | Final target share - using 2017/18 GP-OoH shares | Percentage point difference (2017/18 minus 2013/14) | Percentage (%) difference (2017/18 minus 2013/14) |
| Ayrshire & Arran | 7.289% | 7.288% | -0.001 | -0.011% |
| Borders | 2.158% | 2.158% | 0.000 | -0.011% |
| Dumfries & Galloway | 2.965% | 2.964% | -0.001 | -0.022% |
| Fife | 6.876% | 6.876% | -0.001 | -0.008% |
| Forth Valley | 5.458% | 5.458% | 0.000 | 0.003% |
| Greater Glasgow & Clyde | 22.101% | 22.095% | -0.006 | -0.027% |
| Grampian | 9.744% | 9.744% | 0.000 | -0.005% |
| Highland | 6.598% | 6.597% | -0.001 | -0.008% |
| Lanarkshire | 12.306% | 12.313% | 0.007 | 0.059% |
| Lothian | 15.108% | 15.111% | 0.003 | 0.017% |
| Orkney | 0.508% | 0.508% | 0.000 | 0.009% |
| Shetland | 0.480% | 0.479% | 0.000 | -0.042% |
| Tayside | 7.755% | 7.754% | 0.000 | -0.006% |
| Western Isles | 0.656% | 0.656% | 0.000 | -0.028% |

## Calculation of the GP-OoH adjustment for HSCPs

NRAC Formula target shares are produced at HSCP level to help inform the distribution of certain budgets, such as the Primary Care Improvement Fund. These shares have not previously been released by PHS in the NRAC publication and historically have only been released to the Scottish Government or in response to ad-hoc requests.

TAGRA previously agreed that PHS should release HSCP target shares as part of the NRAC publication to help address such requests that PHS receive [[2]](#footnote-3). This would also ensure a single and consistent set of HSCP shares are used rather than individuals calculating the shares themselves based on other published HSCP-level information and therefore potentially producing different results.

As part of this agreement, it was decided that PHS would investigate whether there was a better way to perform the GP-OoH adjustment at HSCP level. Until the 2023/24 run of NRAC, the GP-OoH adjustment was calculated at NHS Board level only. Consequently, HSCP target shares have been produced by applying the GP-OoH NHS Board weights to their constituent HSCP populations. This approach does not account for variation in the unit cost of delivering OoH services for practices belonging to different HSCPs in the same board area.

Following investigation of the SAF data, PHS have calculated a specific GP-OoH adjustment for each HSCP using the same methodology that is currently used to calculate the adjustment for NHS Boards. (Weighted practice populations calculated using SAF data are aggregated based on the HSCP where the practice is located - see detail for NHS Board calculation above.) Table 4 below presents the final target HSCP shares for 2024/25 using the original methodology for the GP-OoH adjustment versus the new proposed methodology.

Table 4: Health and Social Care Partnership final target shares including GP out of hours adjustment (original versus proposed methodology); 2024/25

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Health and Social Care Partnership | Final HSCP target share - using original GP-OoH adjustment methodology | Final HSCP target share - using proposed GP-OoH adjustment methodology | Percentage point difference (proposed minus original) | Percentage (%) difference (proposed minus original) |
| Aberdeen City | 3.776% | 3.767% | -0.009 | -0.238% |
| Aberdeenshire | 4.233% | 4.241% | 0.008 | 0.190% |
| Angus | 2.161% | 2.163% | 0.001 | 0.048% |
| Argyll and Bute | 1.875% | 1.873% | -0.002 | -0.082% |
| Clackmannanshire and Stirling | 2.585% | 2.587% | 0.003 | 0.108% |
| Dumfries and Galloway | 2.964% | 2.964% | 0.000 | 0.000% |
| Dundee City | 2.804% | 2.799% | -0.005 | -0.161% |
| East Ayrshire | 2.370% | 2.372% | 0.002 | 0.097% |
| East Dunbartonshire | 1.856% | 1.855% | -0.001 | -0.032% |
| East Lothian | 1.907% | 1.908% | 0.002 | 0.086% |
| East Renfrewshire | 1.583% | 1.584% | 0.001 | 0.037% |
| Edinburgh | 8.405% | 8.403% | -0.002 | -0.022% |
| Falkirk | 2.873% | 2.871% | -0.003 | -0.097% |
| Fife | 6.876% | 6.876% | 0.000 | 0.000% |
| Glasgow City | 11.930% | 11.931% | 0.001 | 0.010% |
| Highland | 4.722% | 4.724% | 0.002 | 0.033% |
| Inverclyde | 1.585% | 1.584% | 0.000 | -0.007% |
| Midlothian | 1.653% | 1.653% | 0.000 | 0.014% |
| Moray | 1.736% | 1.737% | 0.001 | 0.056% |
| North Ayrshire | 2.683% | 2.681% | -0.002 | -0.067% |
| North Lanarkshire | 6.378% | 6.376% | -0.002 | -0.033% |
| Orkney Islands | 0.508% | 0.508% | 0.000 | 0.000% |
| Perth and Kinross | 2.789% | 2.793% | 0.003 | 0.125% |
| Renfrewshire | 3.386% | 3.385% | -0.001 | -0.033% |
| Scottish Borders | 2.158% | 2.158% | 0.000 | 0.000% |
| Shetland Islands | 0.480% | 0.480% | 0.000 | 0.000% |
| South Ayrshire | 2.236% | 2.235% | 0.000 | -0.022% |
| South Lanarkshire | 5.936% | 5.938% | 0.002 | 0.036% |
| West Dunbartonshire | 1.754% | 1.754% | 0.000 | 0.003% |
| West Lothian | 3.145% | 3.145% | 0.000 | 0.000% |
| Western Isles | 0.656% | 0.656% | 0.000 | 0.000% |

The proposed change in methodology leads to relatively minor differences in shares across most HSCPs. As expected, the largest changes occur where there is a more significant difference in the urban/rural profile of practices in different HSCPs in a single board area. For example, in NHS Grampian, Aberdeenshire is more rural than Aberdeen City and so Aberdeenshire's share has increased while Aberdeen City's share has decreased. This should however better reflect the additional cost of delivering GP-OoH services in more rural HSCPs. It should be noted that shares remain unchanged for HSCPs where they are the only HSCP in a board area e.g. Dumfries and Galloway.

## Conclusion

The Scottish Government and PHS support the introduction of the new methodology for calculating the GP-OoH adjustment for HSCP shares from 2024/25 onwards: using the OoH weights at HSCP level is more accurate in reflecting the variation in cost of delivering OoH services in HSCPs given their degree of remoteness and rurality. TAGRA members are invited to provide any feedback regarding this proposal or of the issue relating to the use of out-of-date SAF data to calculate the GP-OoH adjustment. Comments can be raised via email or through discussion at the next TAGRA meeting on November 14th 2023.

1. Final papers produced by the Remote and Rural subgroup are on [the TAGRA website](https://www.tagra.scot.nhs.uk/subgroups/remote-and-rural/) [↑](#footnote-ref-2)
2. TAGRA meeting 5th June 2018 - minutes available on [the TAGRA website](https://www.tagra.scot.nhs.uk/wp-content/uploads/2019/04/TAGRA-29th-Meeting-8-Apri-2019-Minutes-of-previous-meeting.docx) [↑](#footnote-ref-3)