Midlands Decision Support Network

MAN Huddle: 29/06/23

Overview of NHS resource allocation models and the ICB Place Based Allocation Tool'

Questions and Answers from the Huddle	
Q1:	**When ACRA make decisions about changes to the allocation formulae, do they get to see who the winners and losers would be?**
A1:	Wherever possible ACRA do not see this. We tend to show the impact by the characteristics of the individuals or areas affected. For instance we may use age-deprivation matrices to show the change in target allocation per head by age and deprivation deciles. On some occasions, sharing geographical information seems like the only way to give ACRA the information they need. ACRA are very good at leaving their local affiliations at the door of the committee, and all local affiliations are transparently recorded.
Q2:	**Can you share your estimated costs (where there are no costs available)?**
A2:	The information we can share are published at www.england.nhs.uk/allocations. The risk of reidentification means we cannot share individual level data.
Q3:	**How do you get the household type?**
A3:	Linking the MPI (Master patient index) to the anonymised Unique Property Reference Number (UPRN) allows us to identify all individuals resident in a property and derive a household type variable that indicates the composition of the household as: • care home • other communal establishment • two adults and one or more children • multi-adult and one or more children • two adults of the same gender • two adults of different gender • one adult and one or more children; or • single person.
Q4	**How did you decide the inclusion of costs in the dependent variable? I mean outpatient services seemed very different to emergency service, is there any assumption behind this choice?**
A4	The dependent variable includes all costs associated with the service for which the model is predicting costs, these are aggregated at the patient level over a financial year. Therefore for the general and acute model, this will include inpatient spells, outpatient appointments and emergency services.

Q5	**What tool/s do you use for your analysis?**
A5	We use SQL for data preparation, and Stata for processing as well as developing of the model. We use Excel to prepare a lot of our outputs for publication.
Q6	**Do you / can you share the code that you use in your models?**
A6	Please visit our website: in the technical annexes (spreadsheets A to X at the bottom), you will find the stata code that we use for each of our models https://www.england.nhs.uk/allocations/
Q7	**To what extent does ACRA and NHSE directors understand the implications of the detailed design decisions that analysts take when developing the formulae (e.g. MAE vs R-squared vs AIC).**
A7	ACRA is supported by a Technical Advisory Group (TAG), which is a sub-group of ACRA consisting of various academics and technical experts, who are well positioned to understand these more technical and detailed analytical decisions, as well as including technical experts in its own ranks. Analytical leadership aside, NHSE directors rely on their expertise as well as the expertise of NHSE's own teams.
Q8	**How much does "need" represent past access and services provided rather than the actual population needs?**
A8	By identifying the factors that are associated with higher or lower utilisation, we estimate the expected level of access or utilisation. ACRA's view is that by removing factors from the model that drive access but are not associated with need, such as how close an individual lives to a hospital, this then becomes a robust estimate of need. A further adjustment is also added for unmet need, recognising that where communities do not access need this may make a utilisation based approach less reliable.
Q9	**Implication that we are essentially subsidising older white people to live in the countryside...**
A9	No, the target shares are based on the need of the population.