FDI QUALITY CONTROL PRACTICES DATA SPECIFICITY

A variety of quality control steps are applied during application of the Federal Disparity Index model. Such steps are intended to assure that the model produces consistent results from the many thousands of data items used in calculations.

Some quality control practices relate to granularity or specificity of data. The specificity of data used in the FDI calculation ranges from single national measures to highly detailed individual measures for hundreds small area sites.

Low Specificity Large Area Data High Specificity Small Area Data

- Single national level measure e.g., the FEHP per user cost benchmark is actuarially derived for the entire Indian population.
- Area measures e.g., most Indian health status measures, birth and death rate data, area-wide funding or spending, etc.
- Regional measures e.g., some price / cost index data relate to specific metropolitan areas or rural geographic areas
- Inter-twined service networks measures e.g. geographic areas composed of intertwined IHS and tribal service delivery systems (hospital service region may include multiple ambulatory sites) and members of different tribes often obtain significant portions of their care from multiple sites. User counts, workloads, funding, and other measures can be difficult separate and uniquely relate to specific sites or groups of users.
- Sites (operating units) measures e.g. local site data for user counts, funding, extent that services are purchased, etc.

In general, data of greater specificity is preferred if reliable and valid.
Unfortunately, higher specificity often involves tradeoffs of measurement variability and random error. A number of quality control practices are designed

to detect this inherent quality of small area data. Often, we collapse or regroup questionable small area data to a higher verifiable level or group if some of the following circumstances occur:

DATA QUALITY RED FLAGS

- a measure is widely different from prior years
- combined effect of new data produces a widely different FDI % result
- site user count is very small (small samples are statistically more erratic and variable) - the FDI model is not as reliable for small sites, but is applied if the service utilization patterns are geographically distinct, fund accounting is separate and distinct, and data appear over wise reasonable.
- measures from non-standard sources (non-RPMS generated user counts for instance)
- funding data or step down (or lack of step down) of shared benefits appears inconsistent with assumptions used in FDI to project costs.
 Unless assumptions are consistent for both the numerator (IHS funds) and denominator (FDI cost projection), the FDI% can be invalid
- geographic areas containing multiple sites with inter-twined delivery systems - several exist in IHS. It is difficult to parse benefits per user where users counted at a site also obtain significant portion of services from neighboring sites (which are not compensated by the source site)
- users counted at ambulatory sites have access to inpatient benefits at IHS or tribal hospital

Regrouping or collapsing small area data to a higher level or group tends to smooth out aberrant variations that may occur as described above. Grouping site level data also risks statistically masking real variations among small area sites. For this reason, we limit data regrouping only to specific items for which we have low confidence (most often a benefits of funding step-down), while retaining the small area data for other FDI calculations. When our confidence in small area data is at intermediate level, we sometimes will statistically combine the higher level measure with the more specific small area data to produce a blended result.

This quality control process is intended to promote a high overall level of confidence in the national level results. We also permit Areas, who have consulted with affected parties, to further refine allocations from the national model using local level data that were not part of national calculations.