

Enhanced Dichotomization Model for Generating Licensing Key Indicators Technical Research Note

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December 2019

The licensing key indicator methodology has been evolving over the past decade in making it more sensitive to the selection process of the specific rules to be included as key indicators. Some of the enhancements can occur because of state licensing data systems being able to provide population data rather than having to select sample data. Because of the nominal nature of licensing data and the severe skewness of the data distributions, non-parametric statistical approaches need to be employed in the analysis of the data.

A key component in the analysis of the licensing data distributions is to dichotomization of the data which is generally not warranted but is acceptable with very skewed data distributions. The dichotomization that has been most successful is a H25/M50/L25 distribution in which H25 represents the High Group of regulatory compliance, M50 which represents the Mediocre or Middle Group of regulatory compliance, L25 which represents the Lowest Group of regulatory compliance. In the past, the methodology allowed for full and substantial compliance within the High Group. This decision is no longer recommended. Rather, in order to decrease the number of False Negatives, it is now recommended that only Full (100%) regulatory compliance is used in defining the High Group. This eliminates the possibility of False Negatives.

By making this above change and in using the full distribution of licensing data, it enhances the results for generating the licensing key indicator rules. For additional information on this modeling please see:

Fiene, Richard (2018), "ECPQIM National Data Base", Mendeley Data, V1.
<http://dx.doi.org/10.17632/kzk6xssx4d.1>

This data base provides the detailed ECPQIM data distributions for the above changes. The enhancements increase the phi coefficients and reliability in either moving or not moving from abbreviated inspections to full comprehensive inspections. This data base also contains clear demonstrations of the efficacy of the ECPQIM – Early Childhood Program Quality Improvement and Indicator Model as a vehicle for improving early care and education programs.