Office of Head Start Program Monitoring Risk Assessment Prediction System: GPMS+Lite

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INTRODUCTION

This research abstract is to present a proposed revision to the Office of Head Start Grantee Monitoring system that is both cost effective and efficient based upon a risk assessment prediction system. It builds off the latest methodological developments in the regulatory science field. A couple of major changes in the methodology dealing with risk assessment as an outcome rather than an input and using program quality as an input rather than an outcome. This is a new approach in utilizing the differential monitoring approach which has been used a good deal in licensing agencies (approximately two-thirds of agencies utilize such an approach). It also builds off the original GPMS: Grantee Performance Management System design in expanding its risk assessment predictive capability.

The GPMS has evolved into a robust program monitoring system in which both Head Start Performance Standard (HSPS) compliance and program quality data are collected for respective grantee facilities. The changes suggested in this research abstract will build upon this base but pivot the direction a bit in focusing more on the risk assessment results based upon a predictive analytical model by identifying specific HSPS's that statistically predict overall compliance with the HSPS standards in general. It will also identify high risk HSPS and those HSPS's that historically have demonstrated a high level of non-compliance. High risk HSPS's need to always be in compliance while those HSPS with a high level of non-compliance need to be brought more into compliance.

Let's start with describing the basic demographics of the data utilized to come up with the revised GPMS.

Demographics

The data were drawn from reviews completed in 2024. There were 335 reviews of programs with 2901 observations made. The number of observations made of individual programs ranged from 1 to 51. Obviously, those with the most observations had the most areas of concern. The observations were mainly in the following three federal regions: Region 4 - South, Region 5 - NorthCentral, and 6 - SouthCentral; although all regions were covered in one way or another. The most frequent number of citations were with the following HSPS: 1302.90: Personnel Policies; 1302.91: Staff Qualifications and Competency; 1302.42: Child Health Status and Care;

1302.47: Safety Practices; 1302.102: Program Goals, Continuous Improvement, and Reporting in which 200 or more times these HSPS were cited.

The types of program reviews were the following: FA1 = 11%; FA2 = 68%; RAN = 20%; and SPC/Special = 0.50. The program review outcomes were: Compliant = 12%; Noncompliant = 48%; and Deficient = 40%. The program finding types were the following: Compliant = 3%; Area of Concern = 1%; Area of Noncompliance = 36%; Deficiency = 13%; Dropped = 46%; and Missing = 1%. Observations were greatest in the following states: Illinois, Louisiana, New Mexico, New York, North Carolina, Pennsylvania, and Texas; this does not necessarily mean that there are more areas of concern in these states, it could be more a factor of the number of programs in each of these states.

METHODOLOGY

The methodology utilized is drawn from the licensing measurement and regulatory science research literature related to regulatory compliance being utilized by the National Association for Regulatory Administration based upon identifying key indicator/predictor rules/regulations. The methodology focuses on compliance levels, risk assessment, prediction rules/standards, fitting the compliance data into a Regulatory Compliance Scale (RCS) for sensitivity analysis, compliance and quality relationships, and comparing the GPMS to other licensing and accreditation monitoring systems across the USA and Canada.

The methodology has been documented in detail and is available on the following research websites (https://rikinstitute.com)(https://www.naralicensing.org/key-indicators), so that information will not be repeated here regarding the methodology.

RESULTS

Key Indicator Predictor HSPS

The first series of results gets at the core set of HSPS that should be assessed all the time. The methodology utilized here was to focus on those standards that had predictive ability when comparing them to overall compliance levels. The following HSPS meet that criterion and were found all statistically significant ($p < .001$) with phi coefficients between .32 - .41.

Early Child Development: ECDHRD18;

Fiscal: FISFDT6, FISFDT114;

Health: HEAHDT7;

Program Development, Monitoring and Improvement: PDMIHSDD6, PDMIPCD3, PDMISAG5, PDMIMHDT12.

The above HSPS constitute the key predictor standards and could be formatted into an abbreviated review tool in which compliance with all these key predictor standards would

provide a pass on a more comprehensive review, while any non-compliance with any of the key predictor standards would usher in a more comprehensive review.

HSPS Compliance

The average overall compliance level was 84% of being in compliance with the HSPS. When these data are placed on a Regulatory Compliance Scale (RCS), the distribution is 7 = 32% of programs; 5 = 35% of programs; 3 = 16% of programs; 1 = 9% of programs. Seven (7) is the highest level of compliance with all HSPS (100%-90%), 5 is a substantial level of compliance with all HSPS (89%-80%), 3 is a mediocre level of compliance with all HSPS (79%-70%), and 1 is a low level of compliance with all HSPS (69% and lower). As one can see, the majority of programs are at either a high or substantial level of compliance with all HSPS. This result is very consistent with what other USA and Canadian jurisdictions have found as well. With rule based or standard based compliance systems, the majority of programs are always in full, high or substantial levels of compliance with few programs to be categorized as mediocre or low compliance.

The following HSPS were in 100% compliance which means that no program had any issues with non-compliance with these HSPS. ECDDT1; ERSEAEDT1, ERSEAECT8; FCEPD3; FSIFDT13, FISFDT15, FISFDT37, FISFDT42, FISFDT83, FISFDT48; HEAHSD15, HEAPD11, HEAEFDT1, and HEAEFDT7. Question here is if these HSPS are easy to comply with or if they are so critical to protecting children that they are always found to be in compliance.

The following HSPS were 25% or higher in non-compliance which means that programs were having issues with complying with these. ECDECDDT2, ECDHRD18; ERSEAEDT13; FISFDT36, FISFDT11, FISFDT18, FISFDT25, FISFDT28, FISFDT35, FISFDT44, FISFDT52, FISFDT54, FISFDT59, FISFDT60, FISFDT9; HEAHDT3, HEAHDT4, HEAHDT7 HEAMHDT11, HEAMHDT10. Obviously these HSPS need attention because of their high non-compliance levels, especially the Fiscal HSPS, some of which were over 75% non-compliant.

Regulatory Compliance Scale (RCS) and Program Quality

To continue looking at states but now from a quality perspective, the following states were found to have the highest levels of quality as measured on the CLASS IS subscale: California, Georgia, Louisiana, Ohio, and Wyoming; while the following states were found to have the lowest levels of quality as measure on the CLASS IS subscale: Washington, Vermont, Oklahoma, Arizona, and Connecticut. The reason for using the CLASS IS subscale is that this subscale was the most significant in making statistical comparisons to other compliance measures.

HSPS compliance and CLASS quality showed significant relationships especially with the Instructional Support (IS) subscale on the CLASS and the RCS results. Remember, the RCS has 4 levels: 7 = 100%-90% HSPS compliance; 5 = 89%-80% HSPS compliance; 3 = 79-70% HSPS

compliance; and 1 = 69% or lower HSPS compliance levels. And as stated above, the percentage of programs that fell into each of these levels was the following: 7 = 32% of programs; 5 = 35% of programs; 3 = 16% of programs; 1 = 9% of programs. And to reiterate, hese results related to the distribution of programs in each of the levels is very consistent with other licensing jurisdictions across the USA and Canada.

The relationship between quality via the CLASS IS subscale and the RCS was the following: 7 = 3.09 average IS CLASS score; 5 = 2.99 average IS CLASS score; 3 = 2.89 average IS CLASS score; 1 = 2.82 average IS CLASS score. These results were significant at $p < .02$. The CLASS CO subscale, although not statistically significant, showed a definite ceiling effect: 7 = 5.85 average CO CLASS score; 5 = 5.85 average CO CLASS score; 3 = 5.76 average CO CLASS score; 1 = 5.77 average CO CLASS score.

The reason for presenting the RCS is that the correlation with the CLASS improves when the RCS is used rather than using compliance violation counts. This has been demonstrated in other jurisdictions as well when a system is converted from a nominal measurement to ordinal measurement which is the case with the RCS.

Quality levels were at a fairly high level and were tightly grouped together not demonstrating the usual dispersion as is evident with other quality tools, such as the Environmental Rating Scales. The average scores and the minimum and maximum values for the subscales Emotional Support (ES), Classroom Organization (CO), and Instructional Support (IS) were the following: ES = 6.06 (4.69-7.00); CO = 5.84 (3.75-6.80); IS = 3.00 (1.79-4.44).

The highest and the lowest scoring programs were drawn from the data in utilizing the RCS and CLASS. Programs were included in the highest scoring programs if they scored a 7 on the RCS and had 6 or above on the Emotional Support (ES) and Classroom Organization (CO) subscales on the CLASS and 4 or above on the Instructional Support (IS) subscale on the CLASS. Only four programs made it onto this program's list. To be on the lowest programs list, a program had to score a 1 on the RCS and below a 3 on the ES and CO subscales and below a 1.5 on the IS subscale on the CLASS. No program met these criteria which obviously is a good result.

CONCLUSION AND RECOMMENDATIONS

The results clearly indicate that the present day GPMS is a rather robust program monitoring system producing excellent distinguishing characteristics that can be used for risk assessment prediction and more targeted technical assistance and training. If totally employed based upon these results a core set of HSPS could be reviewed at every FA1 review. This could be done through the use of the Regulatory Compliance Scale (RCS) proposed in the previous Results section in which any program that scores at a 3 or 1 level would have targeted technical assistance and training; or if any of the predictor HSPS were out of compliance. This approach would be very cost effective and efficient and decrease the amount of time spent on-site and

would focus reviews tying them to the training and technical assistance system resources more directly.

The OHS at a more global level should explore the results which demonstrated the difficulties that programs had complying with specific HSPS and the reasons why they were having such difficulties. Also, they should take a look at those HSPS that are always in compliance; are they standards that truly protect children from substantial risk or are they just easy to comply with and provide little to no value added when it comes to health, safety, protections, and quality.

The compliance data distribution clearly demonstrates how the HSPS are significantly better than licensing standards and that the enforcement of those standards is at a high level. HSPS has always been less skewed than licensing data but not as normally distributed as quality initiative tools.

And lastly, in terms of presenting a view to the general public and one to local programs and staff, possibly utilizing the Regulatory Compliance Scale that utilizes an ordinal scale (1-7) rather than compliance violation counts may be a more effective way to depict the regulatory compliance results. It also fits well with the scales utilized in CLASS and other program quality tools.

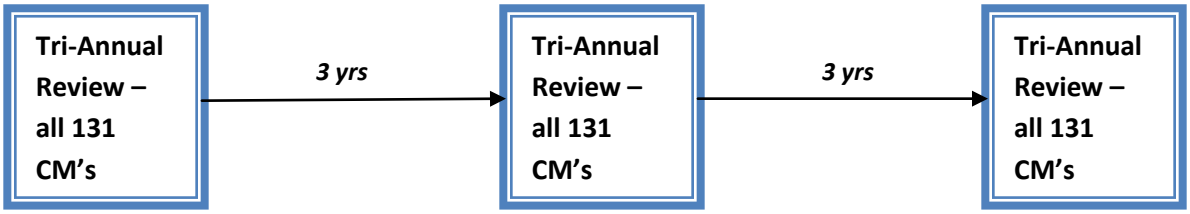
Appendix

I have attached one of the appendices from the Head Start report completed back in 2013 in which the HSIC: Head Start Indicator Checklist was introduced. Do we want to update this to reflect today's approach?

Appendix 7 – Figure 2 – DMLMA Potential Impact on Tri-Annual Head Start Program Reviews

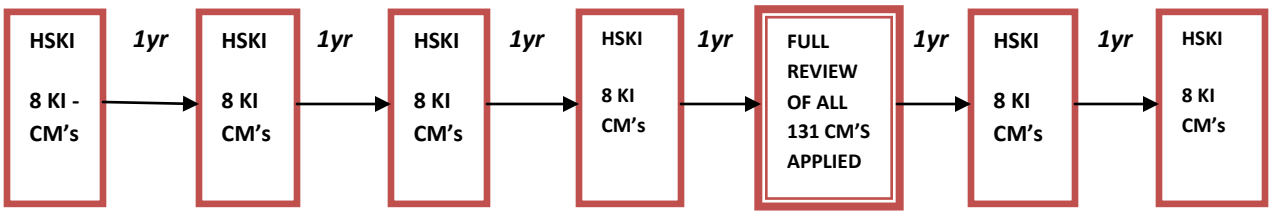
Present Head Start Monitoring System:

All programs receive the same Tri-Annual Reviews regardless of Compliance History:



Proposed DMLMA System with Key Indicators (KI):

100% Compliance with the Head Start Key Indicators (HSKI):



If less than 100% with the Head Start Key Indicators (HSKI):