# Office of Head Start Program Monitoring Risk Assessment Prediction System: GPMS+Lite Richard Fiene PhD

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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 in the USA and Canada 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 (<a href="https://rikinstitute.com">https://www.naralicensing.org/key-indicators</a>), 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 < .0001) with phi coefficients between .45 - .67.

#### Education and Child Development (ECD):

DT20: The grant recipient assesses all education staff to identify strengths and areas of support and those who would benefit most from intensive coaching,

HRD18: All center-based Head Start lead teachers have the appropriate qualifications or the program has an active waiver in place;

#### Fiscal (FIS):

FDT6: The grant recipients staff participate in an annual ethics or standard of conduct training,

FDT11: The grant recipients fiscal staff has a high rate of turnover,

FDT12: The grant recipient believes its fiscal department is adequately staffed,

FDT16: The grant recipient maintains and implements written fiscal policies and procedures addressing standards of conduct for those responsible for financial decision-making and fiscal staff, including conflicts of interest,

FDT1: The fiscal officer responsible for managing Head Start funds has the education and experience necessary for effectively managing the programs fiscal operations, given the fiscal complexity of the program,

FDT32: Does the accounting system maintain an internal audit trail to evidence the approval process?,

FDT33: Does the accounting system have approval rules to automate the sequences of events required for official signoff on records?,

FDT30: Is the grant recipients accounting system integrated with all other financial management systems used by the grant recipient with the capacity to perform all accounting functions digitally?

FDT6: The grant recipients staff participate in an annual ethics or standard of conduct training,

FDT64: The accounting system includes controls to prevent inappropriate administrative cost charges to grant programs, including potential over-obligations of program funds or duplicate payments;

#### Health (HEA):

HDT3: The grant recipient has confirmed if a health care professional has made initial determinations on whether all children are up to date on their preventive and primary medical care (well child visits) within 90 days of enrollment,

HDT7: The grant recipient performs or obtains vision and hearing screenings for all enrolled children within 45 days of enrollment,

HSD13: All grant recipient staff have had an initial background check completed prior to hire,

SSEDT7: The grant recipient attests and has documentation that children are not exposed to lead in paint at any of its facilities;

# Program Development, Monitoring and Improvement:

ECDDT10: The grant recipient analyzes a variety of education data to understand trends and gaps in curriculum implementation, instruction, and education services,

PCD3: The grant recipient provides the policy council with the data needed to effectively conduct its responsibilities,

MHDT12: The grant recipient analyzes a variety of mental health data to understand trends and gaps in services and inform continuous improvement to mental health services,

EDT20: The grant recipient uses a variety of ERSEA data to monitor for compliance with HSPPS, mitigate risk of actual or potential fraudulent enrollment practices, and inform continuous improvement to ERSEA practices,

FCEDT15: he grant recipient analyzes a variety of family data to understand trends and gaps in services and inform continuous improvement to FCE services,

HSDD6: The recipient maintains a system of ongoing oversight to ensure effective implementation of the program performance standards,

FDT39: The grant recipient provides the policy council with the data needed to effectively conduct its responsibilities,

FDT40: The grant recipient provides the governing body with the data needed to effectively conduct its responsibilities,

HDT3: The grant recipient uses a variety of health data to monitor for compliance with HSPPS and inform continuous improvement to health services,

SAG2: The grant recipients established program management structure supports effective management and oversight of each service area,

SAG3: The grant recipient has systems to ensure adequate staffing,

SAG5: The grant recipient analyzes a variety of data across service areas to understand trends and gaps in services and inform continuous program improvements.,

SAG6: The grant recipient analyzes a variety of education data to understand trends and gaps in curriculum implementation, instruction, and education services.

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 81% of being in compliance with the HSPS. When these data are placed on a Regulatory Compliance Scale (RCS), the distribution is 7 = 10% of programs; 5 = 54% of programs; 3 = 25% of programs; 1 = 10% of programs. Seven (7) is the highest level of compliance with all HSPS (100%-95%), 5 is a substantial level of compliance with all HSPS (94%-90%), 3 is a mediocre level of compliance with all HSPS (89%-85%), 1 is a low level of compliance with all HSPS (84% or lower). As one can see, the majority of programs are at a 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 fewer 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: The grant recipient uses research-based, developmental standardized screening tools to complete the individual screenings for children across all program options;

ERSEAEDT1: The grant recipient locates children and expectant families with the greatest need (e.g., low family income, children with disabilities, children who are in foster care or experiencing homelessness),

ERSEAEDT8: The programs enrollment includes less than 35 percent of families whose incomes are within 100 to 130 percent of the poverty line.;

FCEPD3: The grant recipient communicates with families in their preferred language to the extent possible;

FISFDT15: Does the grant recipient require multiple levels of approval, including leadership sign-off, as part of its fiscal procedures and activities?,

FISFDT37: Who, if anyone, does the grant recipient require to sign off on or approve financial reporting requirements and filings?,

FISFDT42: Who in the grant recipients program collaborates on developing the budget?,

FISFDT83: How frequently does the grant recipient draw down cash from the Payment Management System (PMS) system?,

FISFDT48: The grant recipient regularly examines and addresses the financial impact of emerging program needs or goals and other changes in program operations affecting budgeted costs;

HEAHSD15: he grant recipient reviewed all information found in each background check to understand the relevancy of any issues discovered through the process,

HEAPD11: The grant recipient provides opportunities for families to discuss observations or concerns they have about their child's mental health and social and emotional well-being and how it relates to children's typical and atypical behavior and development, as well as provide support on how to appropriately respond to their child in order promote their child's social and emotional development,

HEAEFDT1: The grant recipient provides prenatal and postnatal education and information and supports for emotional well-being to enrolled expectant families, including their partners, 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: The grant recipient performs developmental screenings within the prescribed timeframes (for programs operating more than 90 days: 45 days of enrollment; for programs operating less than 90 days: within 30 days of enrollment),

ECDHRD18: All center-based Head Start lead teachers have the appropriate qualifications or the program has an active waiver in place;

ERSEAEDT13: The grant recipient is currently under-enrolled;

FISFDT36: The grant recipient meets the on-demand and routine reporting requirements (e.g., Standard Forms SF-425, SF-429, financial reports to Governing Body and Policy Council) on the requested date. 75.302(a),

FISFDT11: The grant recipient's fiscal staff has a high rate of turnover,

FISFDT18: Within the past three (3) years, has grant recipient received an allegation (anonymous or known) of financial fraud or inappropriate financial management activities?,

FISFDT25: Within the past 3 years has the grant recipient changed financial management or accounting systems?,

FISFDT28: Is access to the accounting system limited to a single individual (i.e., CFO or head of the fiscal department)?,

FISFDT35: Does the financial management system have override controls for reports?,

FISFDT44: Is the budget development process maintained and approved by a single employee?,

FISFDT52: Is a single person responsible for accounts payable?,

FISFDT54: Are there large outstanding payables?,

FISFDT59: Does the grant recipient have a large number of procurements made by noncompetitive proposals (solicitation of a proposal from only one source)?,

FISFDT60: Are any vendors paid in cash?,

FISFDT9: None of the grant recipient's fiscal staff has training or experience in compliance monitoring and fiscal regulations (e.g., Uniform Guidance, Head Start Program Performance Standards, Head Start Act);

HEAHDT3: The grant recipient has confirmed if a health care professional has made initial determinations on whether all children are up to date on their preventive and primary medical care (well child visits) within 90 days of enrollment,

HEAHDT4: The grant recipient has confirmed if a health care professional has made initial determinations on whether all children are up to date on their preventive and primary oral health care (dental periodicity schedule) within 90 days of enrollment,

HEAHDT7: The grant recipient performs or obtains vision and hearing screenings for all enrolled children within 45 days of enrollment,

HEAMHDT11: The grant recipient has expelled one or more children due to behavior in the previous 12 months, and

HEAMHDT10: The grant recipient suspended one or more children due to behavior in the previous 12 months.

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%-95% HSPS compliance; 5 = 94%-90% HSPS compliance; 3 = 89%-85%; 1 = 84% or less. And as stated above, the percentage of programs that fell into each of these levels was the following: 7 = 10% of programs; 5 = 54% of programs; 3 = 25% of programs; 1 = 10% of programs. And to reiterate, these 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 = 3.08 average IS CLASS score; 5 = 3.05 average IS CLASS score; 3 = 2.92 average IS CLASS score; 1 = 2.78 average IS CLASS score. These results were significant at p < .005. The relationship between the CLASS CO subscale and the RCS was the following: 7 = 5.86 average CO CLASS score; 5 = 5.88 average CO CLASS score; 3 = 5.76; 1 = 5.78 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 1 or 3 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 data distribution 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 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 with FA1 and FA2 reviews where FA1 would utilize a key indicator approach and FA2 a more RCS approach?