

# **NARA LICENSING SEMINAR: KEY INDICATORS OVERVIEW**

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# Key Indicators (KI)

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- **Key Indicators are predictor rules that statistically predict overall compliance with all rules.**
- ***13 Indicators of Quality Child Care* is an example of this approach.**
- **Most effective if KI are used with the Risk Assessment (RA) approach.**
- **Must be 100% compliance with key indicator rules.**

# Advantages of Key Indicators

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- **Quality of Licensing is maintained.**
- **Balance between program compliance and quality.**
- **Cost savings.**
- **Predictor rules can be tied to child outcomes.**

# Pre-Requisites for Key Indicators

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- ❑ **Licensing rules must be well written, comprehensive, and measureable.**
- ❑ **There must be a measurement tool in place to standardize the application and interpretation of the rules.**
- ❑ **At least one year's data should be collected.**

# How to Develop Key Indicators

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- ❑ **Collect data from 100-200 providers that represent the overall delivery system in the state.**
- ❑ **Collect violation data from this sample and sort into high (top 25%) and low (bottom 25%) compliant groups.**
- ❑ **Statistical predictor rules based upon individual compliance.**
- ❑ **Add additional rules.**
- ❑ **Add random rules.**

# Key Indicator Formula Matrix

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Use data from this matrix in the formula on the next slide in order to determine the phi coefficients.

	<i>Providers In Compliance with specific standard</i>	<i>Programs Out Of Compliance with specific standard</i>	<i>Row Total</i>
<i>High Group = top 25%</i>	<b>A</b>	<b>B</b>	<b>Y</b>
<i>Low Group = bottom 25%</i>	<b>C</b>	<b>D</b>	<b>Z</b>
<i>Column Total</i>	<b>W</b>	<b>X</b>	<b>Grand Total</b>

# Key Indicator Matrix Expectations

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- $A + D > B + C$
- $A + D = 100\%$  is the best expectation possible.
- If **C** has a large percentage of hits, it increases the chances of other areas of non-compliance (False positives).
- If **B** has a large percentage of hits, the predictive validity drops off considerably (False negatives).

# Criteria for Using Key Indicators

- **The facility had:**
  - A regular license for the previous two years
  - The same director for the last 18 months
  - No verified complaints within the past 12 months
  - The operator has corrected all regulatory violations cited within 12 months prior to inspection
  - A full inspection must be conducted at least every third year
  - Not had a capacity increase of more than 10 percent since last full inspection
  - A profile that does not reveal a pattern of repeated or cyclical violations
  - No negative sanction issued within the past 3 years



# Key Indicator Systems Summary

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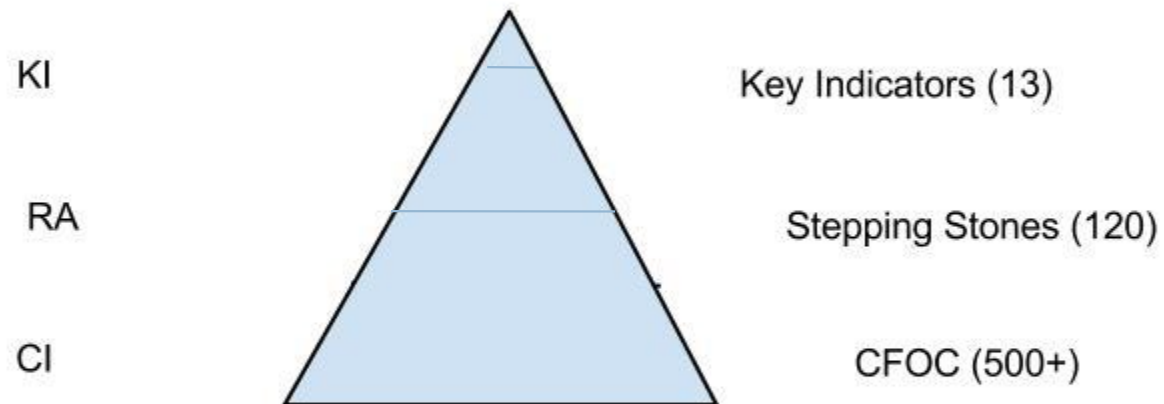
## 1980 - 2010

- Time savings only.
- Child care mostly.
- Child care benchmarking.
- Substantial compliance.
- Safeguards.
- Tied to outcomes study.
- Adult residential – PA.
- Child residential – PA.
- Risk assessment/weighting.

## 2011+

- Time and cost savings.
- All services.
- Benchmarks in all services.
- CC national benchmarks.
- Safeguards.
- Tied to outcomes study.
- National benchmarks.
- Inter-National benchmarks.
- Risk assessment/DMLMA.

Relationship of Key Indicators (KI), Stepping Stones (RA), and Caring for Our Children (CFOC)(CI)



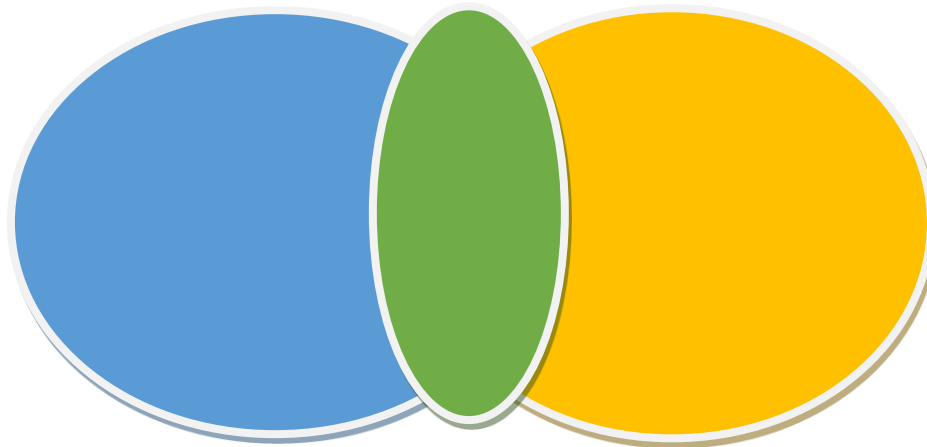
The above diagram depicts the relationship amongst KI, RA, and CI in which the full set of rules is represented by CFOC - Caring for Our Children, followed by RA which are the most critical rules represented by Stepping Stones, and finally the predictive rules represented by the 13 Key Quality Indicators.

# Relationship of Comprehensive Reviews (CR) to Key Indicator (KI) or Risk Assessment (RA) Rule Non-Compliance

Key Indicator Rule

Both

Risk Assessment Rule



## Prediction

### Non-Compliance

2+ Rules = CR  
1 Rule = Section  
Absolute scoring 1/0

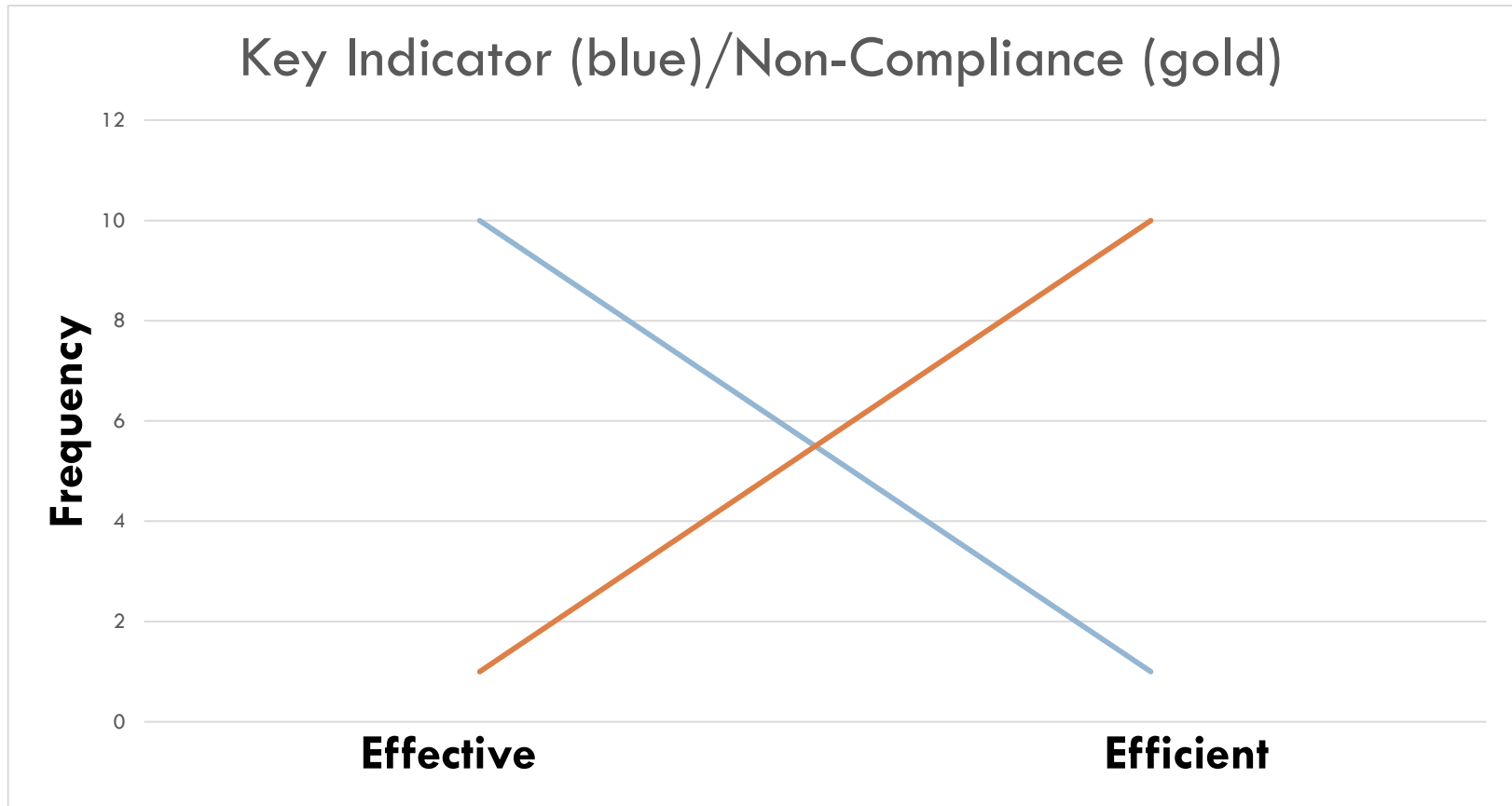
## Risk to Children

### Non-Compliance

Point System = CR  
1 Extreme Rule = CR  
Relative scoring 1/9

# Key Indicator/Non-Compliance Relationship

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# Examples of Key Indicator Applications

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- **Health and Safety Licensing Key Indicators.**
- **Stepping Stones Key Indicators**
- **Office of Head Start Key Indicators.**
- **Accreditation Key Indicators – NECPA – National Early Childhood Program Accreditation.**
- **Environmental Rating Scale Key Indicators – Centers.**
- **Environmental Rating Scale Key Indicators – Homes.**
- **Caregiver Interaction Scale Key Indicators.**
- **Quality Rating & Improvement System Key Indicators – QualiStar.**
- **Footnote: Child & Adult Residential Care Key Indicators.**
- **Footnote: Cruising Industry in general and Royal Caribbean in particular.**

# Examples of Health & Safety Key Indicators

(Fiene, 2002a, 2003, 2007, 2013, 2014)

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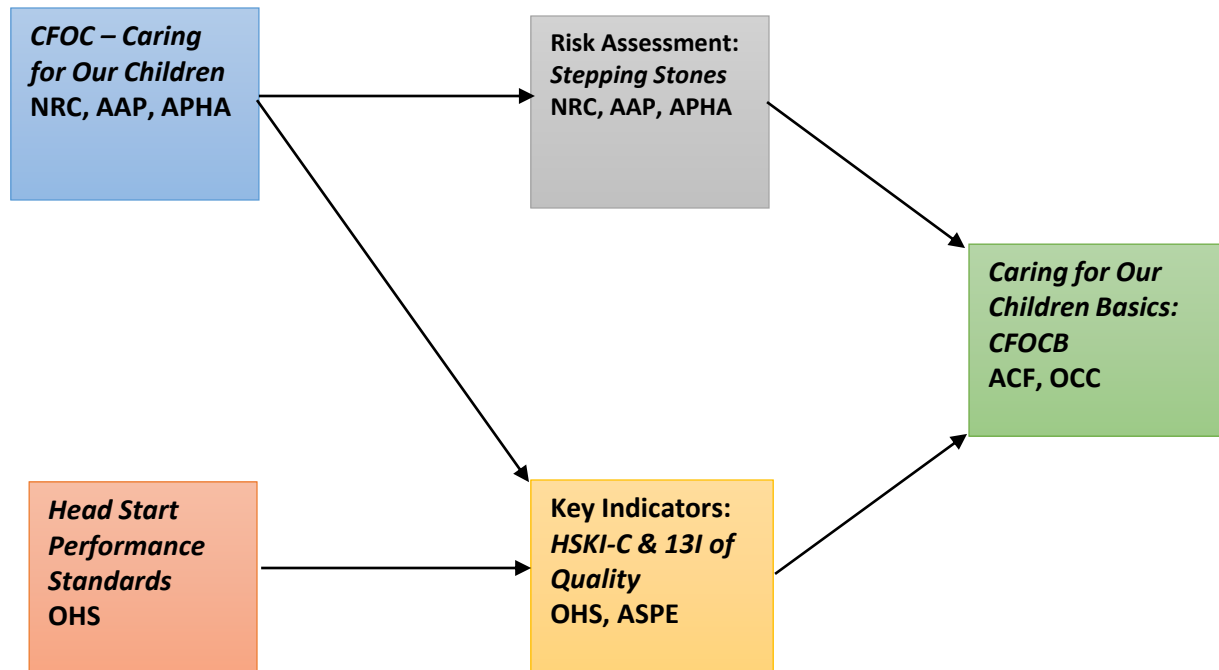
- ❑ **Program is hazard free in-door and out-doors.**
- ❑ **Adequate supervision of children is present.**
- ❑ **Qualified staff.**
- ❑ **CPR/First Aid training for staff.**
- ❑ **Hazardous materials are inaccessible to children.**
- ❑ **Staff orientation and training.**
- ❑ **Criminal Record Checks.**
- ❑ **Ongoing monitoring of program**
- ❑ **Child immunizations**

# Caring for Our Children Basics (2015)

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- **Stepping Stones 3 (2013)**
- **Senate Bill 1086 (2014)**
- **Notice for Proposed Rule Making to Amend CCDF Regulations (2013)**
- **27 Indicators from Head Start Program Standards (2014)**
- **15 Key Indicators from Stepping Stones 3 (Fiene)(2013)**
- **77 Observable Health and Safety Standards for Early Care and Education Providers from Caring for Our Children (Alkon)(2014)**

# RELATIONSHIP OF KEY INDICATORS/RISK ASSESSMENT TOOLS AND *CARING FOR OUR CHILDREN BASICS (2015)*





# The Key Indicators from *Stepping Stones* (3<sup>rd</sup> Edition)

- **1.1.1.2 - Ratios for Large Family Child Care Homes and Centers**
- **1.3.1.1 - General Qualifications of Directors**
- **1.3.2.2 - Qualifications of Lead Teachers and Teachers**
- **1.4.3.1 - First Aid and CPR Training for Staff**
- **1.4.5.2 - Child Abuse and Neglect Education**
- **2.2.0.1 - Methods of Supervision of Children**
- **3.2.1.4 - Diaper Changing Procedure**
- **3.2.2.2 - Handwashing Procedure**
- **3.4.3.1 - Emergency Procedures**
- **3.4.4.1 - Recognizing and Reporting Suspected Child Abuse, Neglect, and Exploitation**
- **3.6.3.1 - Medication Administration**
- **5.2.7.6 - Storage and Disposal of Infectious and Toxic Wastes**
- **6.2.3.1 - Prohibited Surfaces for Placing Climbing Equipment**
- **7.2.0.2 - Unimmunized Children**
- **9.2.4.5 - Emergency and Evacuation Drills/Exercises Policy**

# Development of Head Start Key Indicators

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- **Interest in streamlining the monitoring protocol – Tri-Annual Reviews.**
- **Selected a representative sample from the overall Head Start data base.**
- **The Head Start monitoring system is an excellent candidate for developing key indicators and differential monitoring system:**
  - ▣ **Highly developed data system to track provider compliance history.**
  - ▣ **Well written, comprehensive standards.**
  - ▣ **Monitoring Protocols in place for collecting data.**
  - ▣ **Risk assessment system in use.**
  - ▣ **Program quality (CLASS) data collected.**
- **Example of a national system using key indicators.**
- **Head Start has all the key elements present from the Differential Monitoring Model as presented earlier.**

# Other Examples of Key Indicators

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## □ CIS

- Item 5 – Excited about Teaching
- Item 7- Enjoys Children
- Item 12 – Enthusiastic

## □ FDCRS

- Item 4 – Indoor Space Arrangement
- Items 14b, 15b, 16 – Language
- Item 18 – Eye hand Coordination

## □ ECERS

- Item 16 – Children Communicating
- Item 31 – Discipline

# QRIS Key Indicators – CO. QualiStar

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- ❑ **The program provides opportunities for staff and families to get to know one another.**
- ❑ **Families receive information on their child's progress on a regular basis, using a formal mechanism such as a report or parent conference.**
- ❑ **Families are included in planning and decision making for the program.**

# Conceptual Similarities Between Licensing & QRIS and Key Indicator Methodology

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- **100% Compliance with child care health & safety rules = QRIS Block System. *Cannot use Key Indicators.***
- **Substantial but not 100% Compliance with child care health & safety rules = QRIS Point. *Can use Key Indicators.***
- **Both Licensing and QRIS use rules/standards to measure compliance. Licensing rules are more structural quality while QRIS standards have a balance between structural and process quality. Both rules and standards can be used within the Key Indicator methodology.**

# Lessons Learned

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- We have learned how to deal more effectively with very skewed data through dichotomization grouping of a high versus a low compliant groups.
- Risk assessment only focuses on compliance and high risk rules which generally are always in compliance.
- Key indicators focus on high and low compliance differences with these rules generally being somewhere in the middle range, not in compliance the majority of the time nor out of compliance the majority of the time.
- It continues to be a fact that all rules are not created equal nor are they administered equally.
- Most recently we have seen that when higher standards are applied, especially with Pre-K initiatives, this goes a long way in helping to discriminate the top performers from the mediocre performers.

# Future Research

- The crucial need for future research in the human services licensing and regulatory compliance area is for validation studies of the above approaches, Key Indicators and Risk Assessment methodologies to make certain that they are working as they should.
- Another validation study is needed regarding the relationship between program compliance and program quality. This is such an important finding about the plateau of program quality scores with increasing regulatory compliance as one moves from substantial compliance with all rules to full compliance with all rules.
- A clear delineation needs to occur to establish appropriate thresholds for the number of key indicator/predictor rules that provide a balance between efficiency and effectiveness that can diminish the number of false positives and especially false negatives.

# Core Indicators – Final Thoughts

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- **Childhood Immunizations (PC)**
- **Director & Teacher Qualifications (PC, PQ)**
- **Mentoring/Coaching (PQ/PD)**
- **Family Engagement (PQ)**
- **Social-Emotional & Language Learning/Competencies (ELS, PD)**