

**HUMAN SERVICES LICENSING
MEASUREMENT, REGULATORY COMPLIANCE
AND PROGRAM MONITORING SYSTEMS:
ECPQI2M4©/DMLMA©**

Richard Fiene, Ph.D.

**Research Psychologist
RIKI/NARA**

The logo for Nara RIKI features the word "nara" in a lowercase, black, sans-serif font. A thin, dark red arc is positioned above the letters "a" and "r". Below "nara" is the word "RIKI" in a bold, black, serif font, with all letters in uppercase.

nara
RIKI

Contents

Methods for Achieving Quality Child Care

Regulatory Paradigms

DMLMA Logic Model & Validation Approaches

DMLMA Expected Thresholds

Licensing/Program Compliance (PC) and Program Quality (PQ)

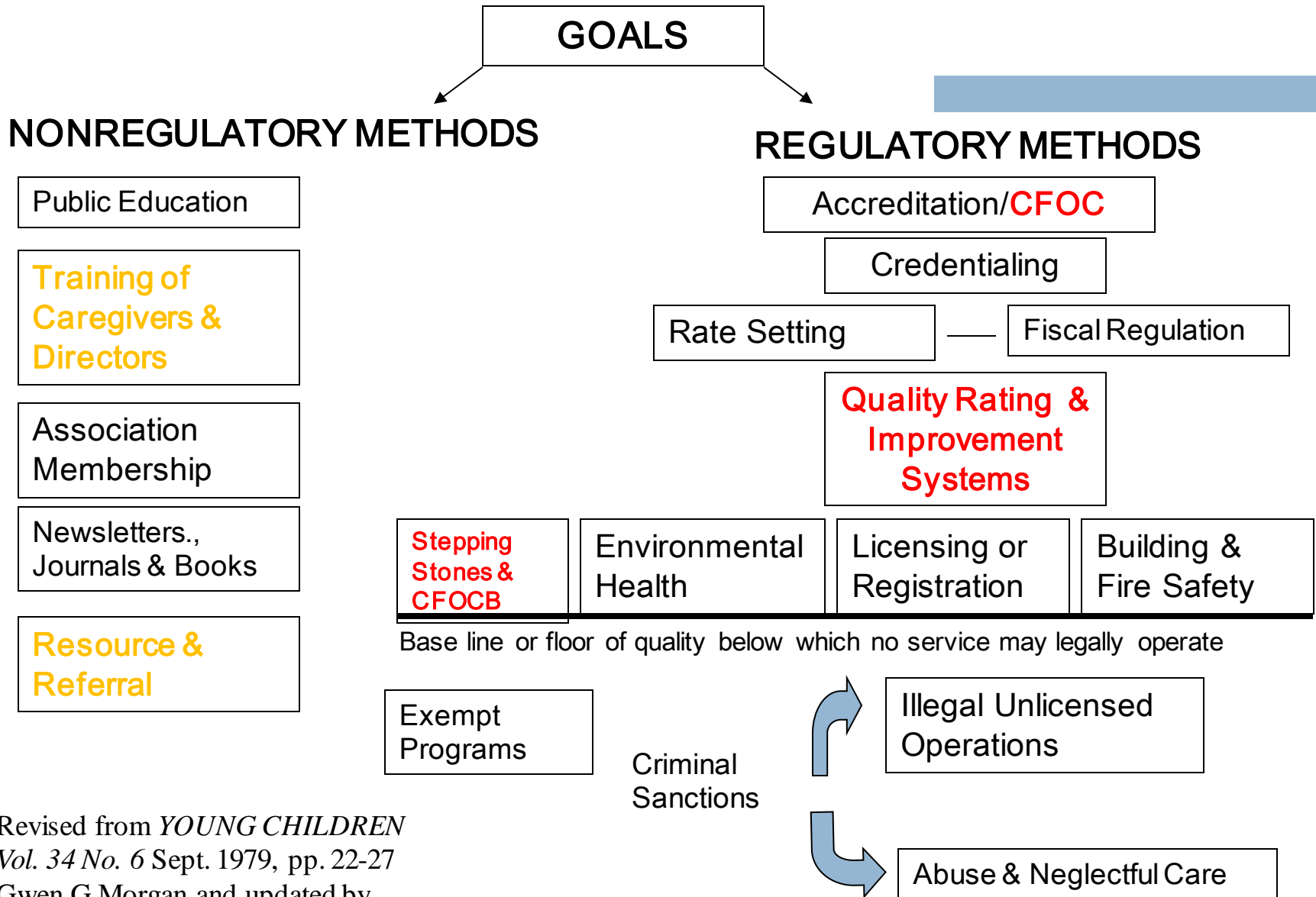
Risk Assessment (RA) and Key Indicators (KI)

Differential Monitoring (DM)

Professional Development (PD) and Child Outcomes (CO)

Previous Models (ECPQIM 1 – 4+)

Methods for Achieving Quality Child Care



Revised from *YOUNG CHILDREN*
Vol. 34 No. 6 Sept. 1979, pp. 22-27
Gwen G Morgan and updated by
Rick Fiene, Dec 2012.

Achieving Quality Child Care

5

- **Quality care is achieved by both regulatory and non-regulatory approaches. However, licensing provides the threshold or floor of quality below which no program should be permitted to operate.**

Other regulatory approaches toward achieving quality

6

- ❖ **Credentialing:** A formally recognized process of certifying an individual as having fulfilled certain criteria or requisites. (PD)
- ❖ **Accreditation:** The formal recognition that an agency or organization has compiled with the requisites for accreditation by an accrediting body. Accreditation usually requires the organization seeking this form of recognition to pay for the cost of the process. The organization bestowing the accreditation has no legal authority to compel compliance. It can only remove accreditation. (PQ)
- ❖ **Best Practices:** Through affiliation with professional organizations, an agency becomes aware of “best practices” and establishes its own goals to achieve a higher level of care services. (PQ – CFOC)

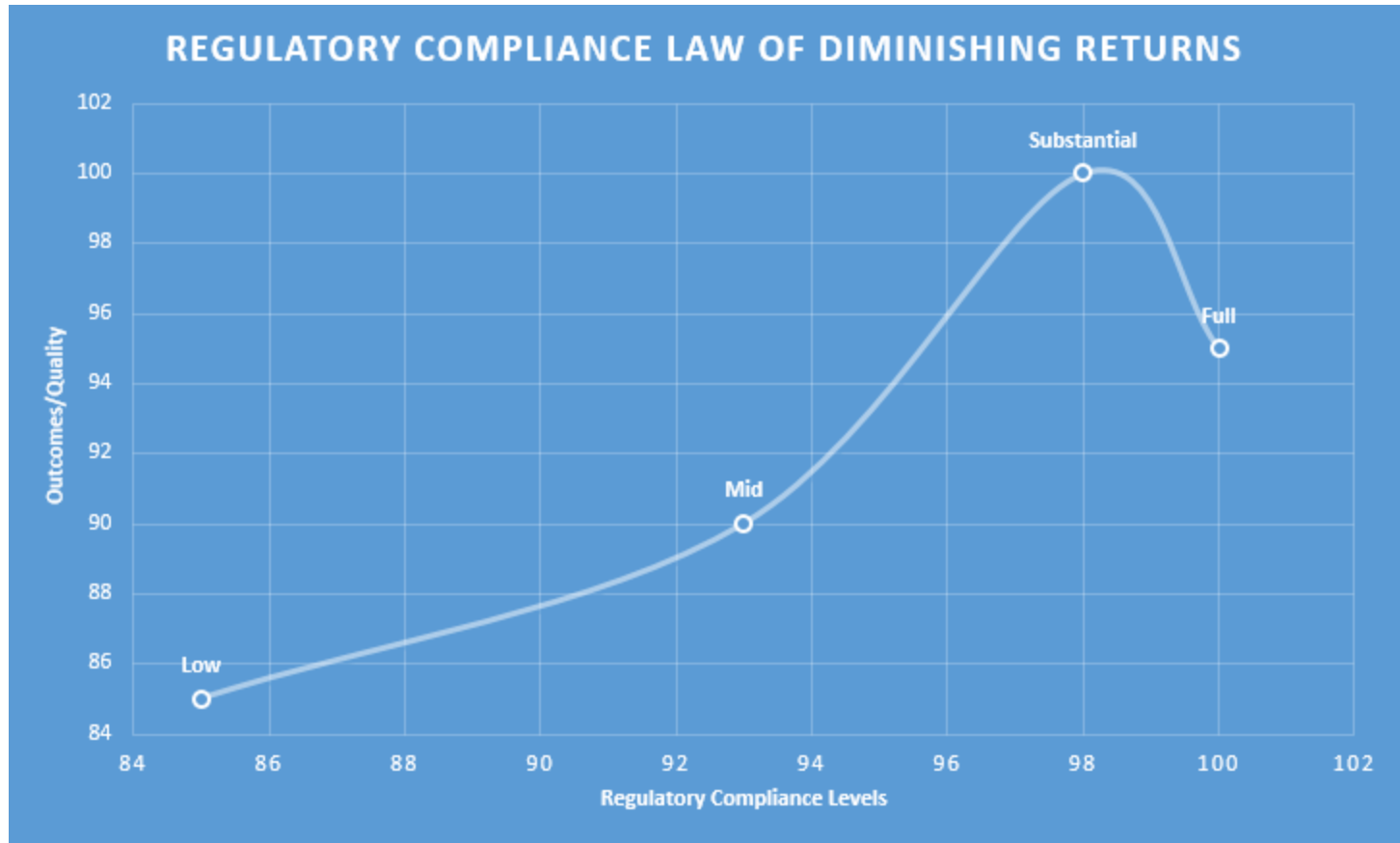
Non-regulatory approaches to achieving quality care in human services facilities or programs

7

- ❑ Consultation
- ❑ Consumer Education
- ❑ Peer Support Associations
- ❑ Professional Organizations
- ❑ Resource and Referral
- ❑ Technical Assistance
- ❑ Mentoring/Coaching
- ❑ Training-Staff Development

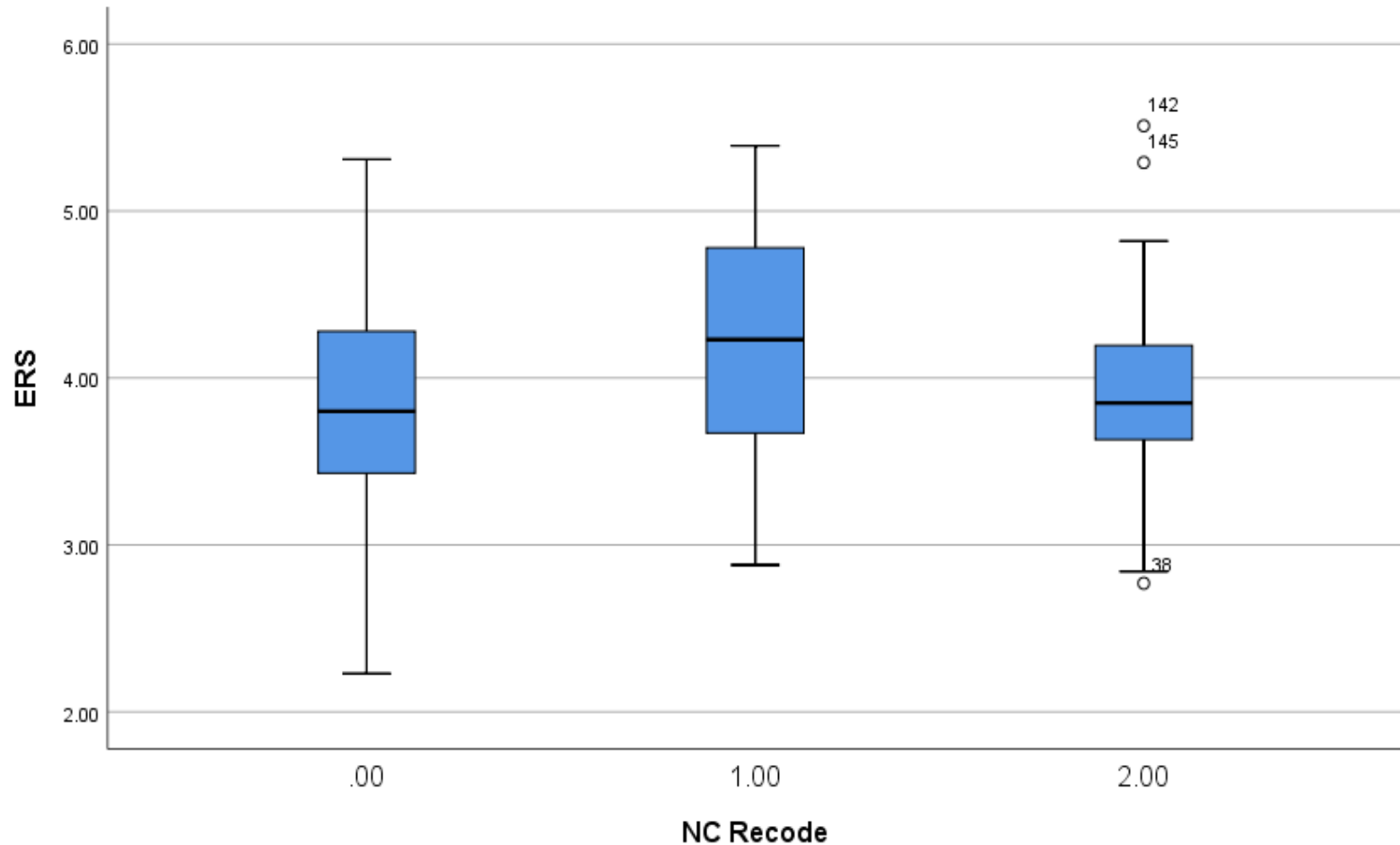
Regulatory Compliance Law of Diminishing Returns

8



Boxplots of ERS and NC Scores

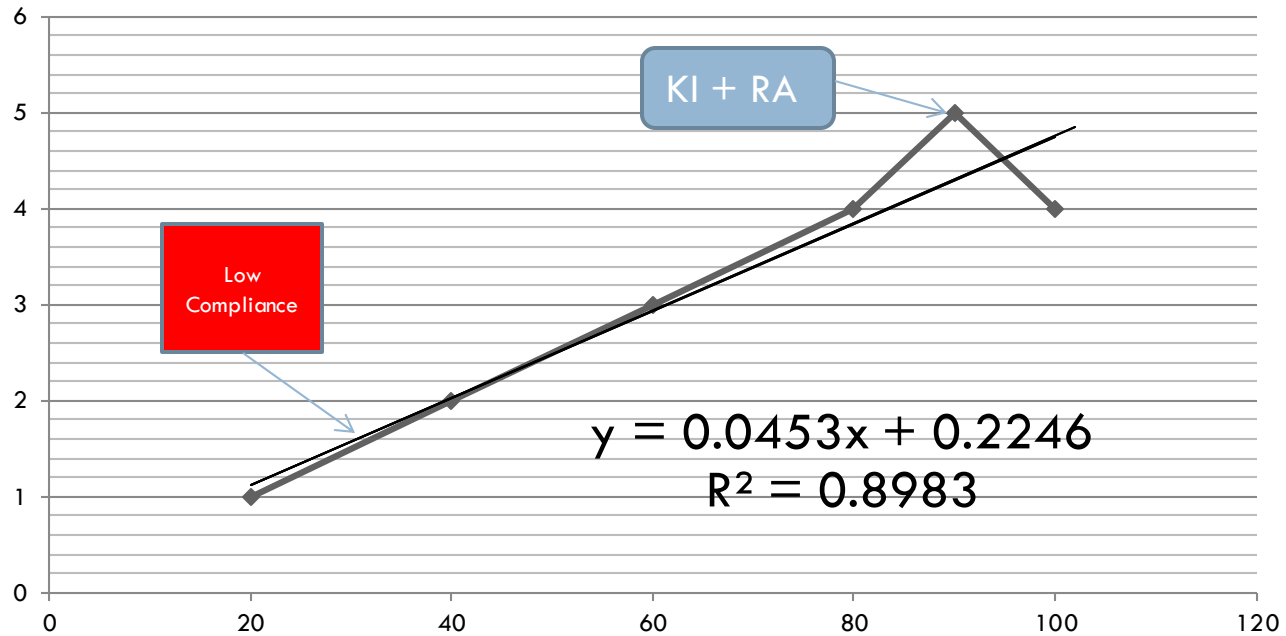
9



Relationship between PC (CI) & PQ

(Fiene & Nixon, 1985)(Fiene, 1985)

PQ = ERS/CLASS



PC = % Rule Compliance

Regulatory Compliance (RC) Levels (PC) By Program Quality Scores

11

Licensing Buckets	Regulatory Compliance Legend	Compliance Levels	Number of Programs Assessed	ERS Average Scores
0	Full	0 Violations	82	4.07
1	Substantial	1-2 Violations	69	4.28
2	Mediocre	3-10 Violations	163	4.17
3	Low	11+ Violations	71	3.93

Comparing HSPS Violations with CLASS Scores (Fiene, 2013c)

12

HSPS/CM Violations	IS	ES	CO	Number/Percent
0 (Full Compliance)	3.03	5.99	5.59	75/19%
1-2 (Substantial Compliance)	3.15	5.93	5.50	135/35%
3-8 (Mid-Compliance)	2.87	5.85	5.37	143/40%
9-19 (Lower Compliance)	2.65	5.71	5.32	28/6%
20-25 (Lowest Compliance)	2.56	5.52	4.93	3/1%
Significance	F = 4.92; p < .001	F = 4.918; p < .001	F = 4.174; p < .003	

CM Violations = Compliance Measure Violations (lower score = higher compliance)(higher score = lower compliance)

IS = Average CLASS IS (Instructional Support) Score

ES = Average CLASS ES (Emotional Support) Score

CO = Average CLASS CO (Classroom Organization) Score

#/% = Number of programs and Percent of programs at each level of compliance

PC & PQ Comparison of CC and PK (Fiene, 2013e)

13

PC = Child Care Licensing Compliance

- ❑ **Licensing / ECERS-R**
- ❑ 100 / 3.40 Full Compliance
- ❑ 99 / 4.35 Substantial Compliance
- ❑ 98 / 3.89 Substantial Compliance
- ❑ 97 / 3.15
- ❑ 96 / 3.16 Mediocre Compliance
- ❑ 95 / 3.53
- ❑ 90 / 2.56
- ❑ 80 / 2.38 Low Compliance

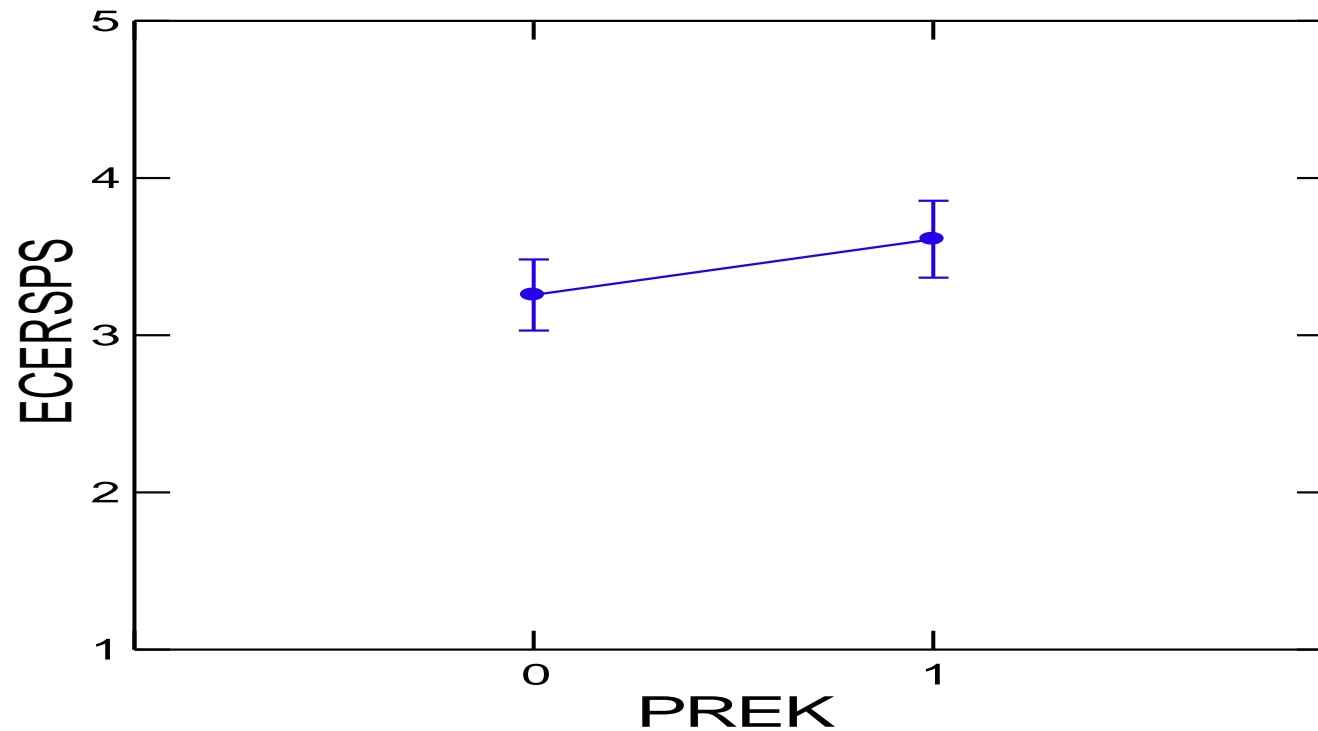
PQ = Pre-K Program Licensing Compliance

- ❑ **Licensing / ECERS-R**
- ❑ 100 / 4.88 Full Compliance
- ❑ 99 / 4.13
- ❑ 98 / 4.38 Substantial Compliance
- ❑ 97 / 3.99
- ❑ 96 / 4.36
- ❑ 95 / 4.60
- ❑ 90 / 3.43 Medium Compliance
- ❑ 80 / 2.56 Low Compliance

Impact of PK on ECERS

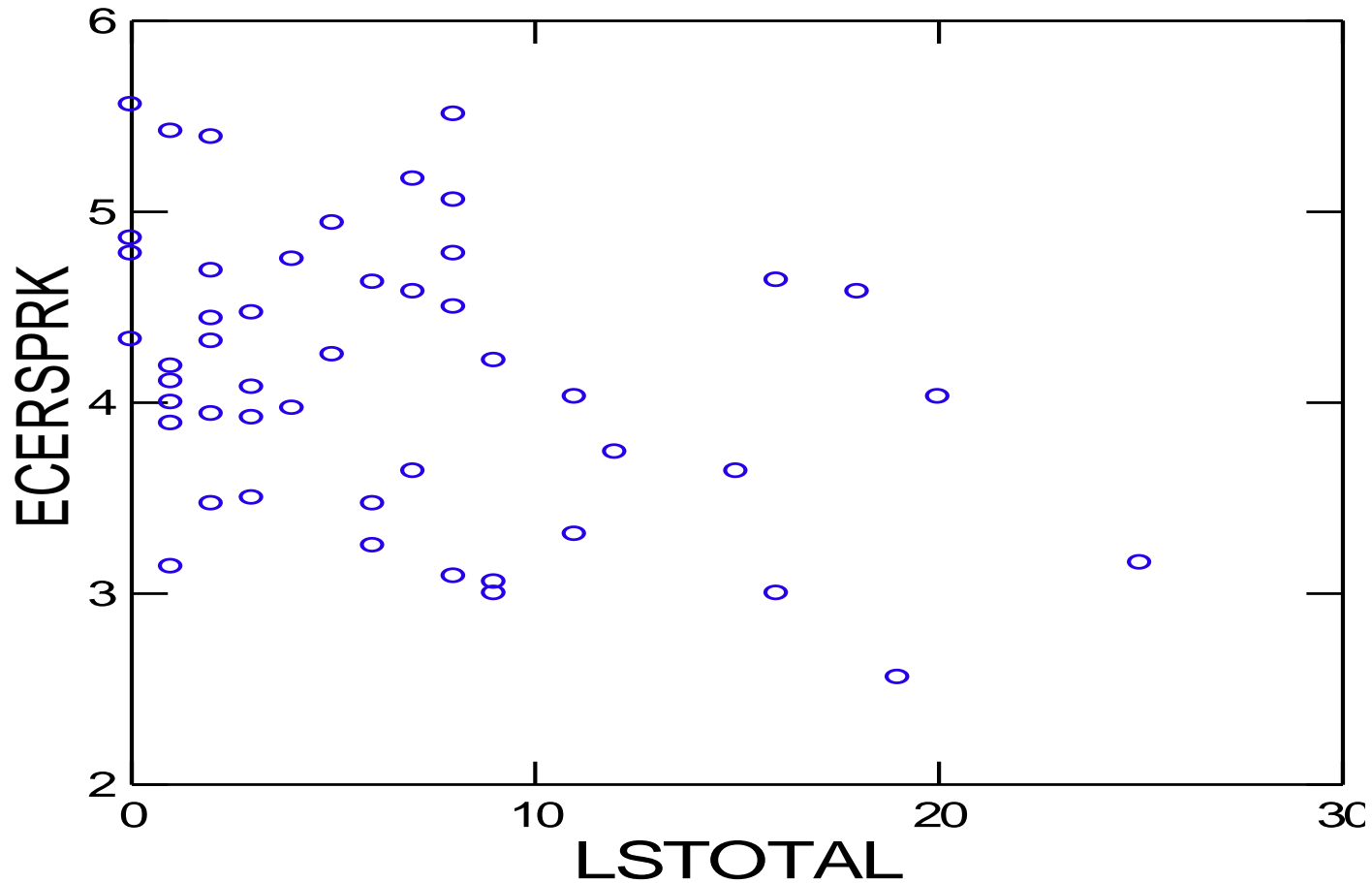
14

Least Squares Means



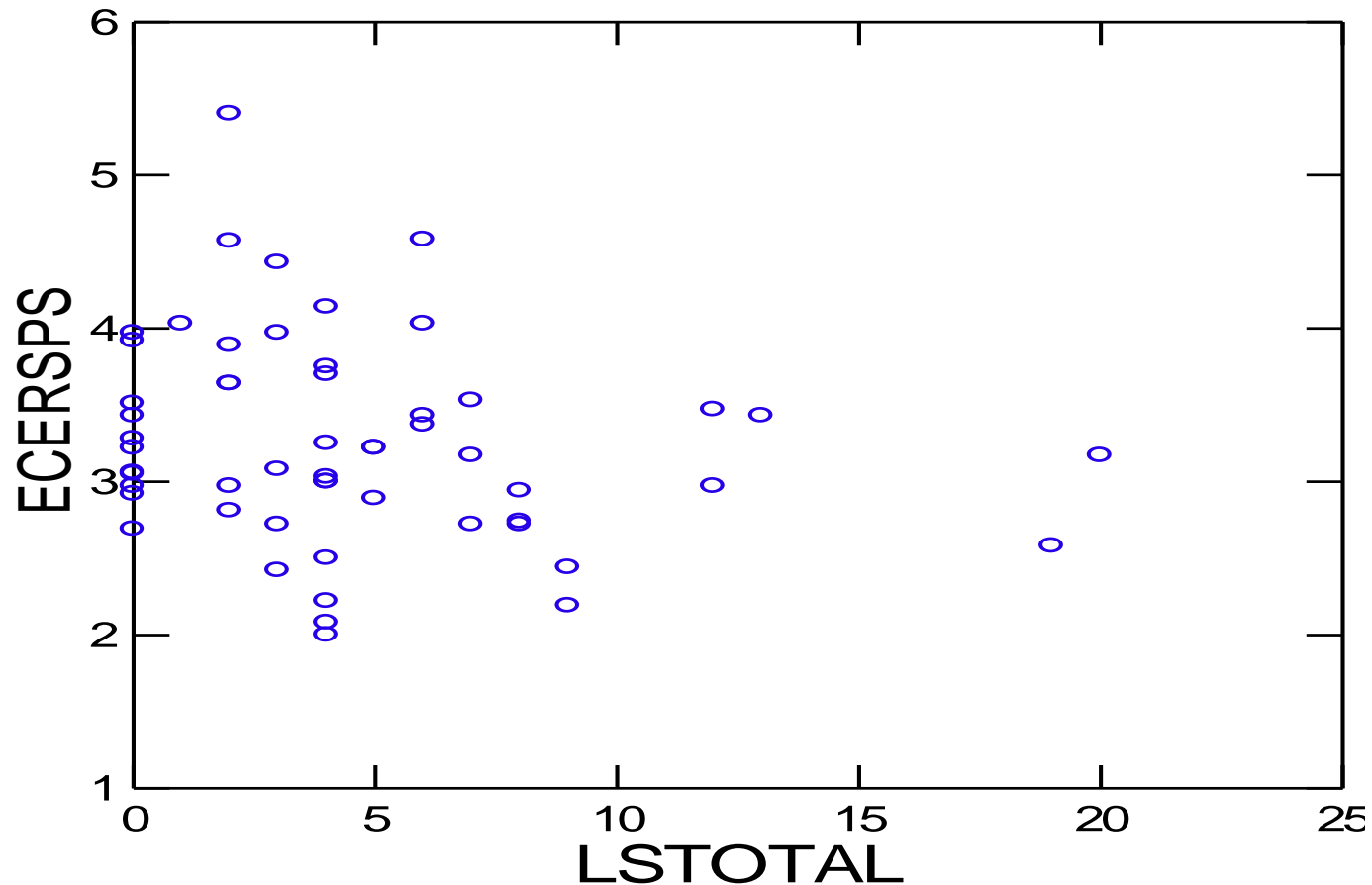
ECERS PRE-K & Licensing Scores

15



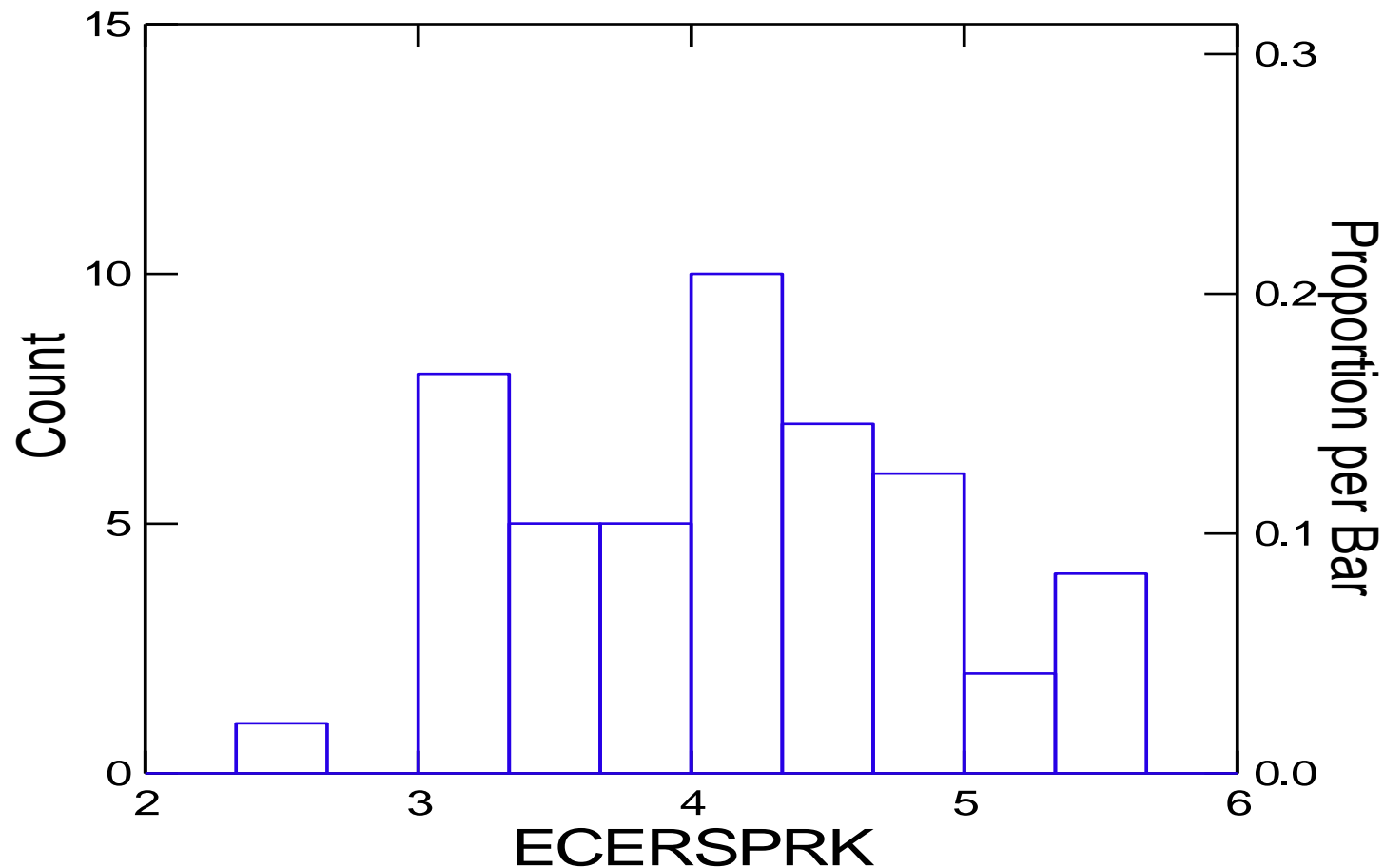
ECERS Child Care & Licensing Scores

16



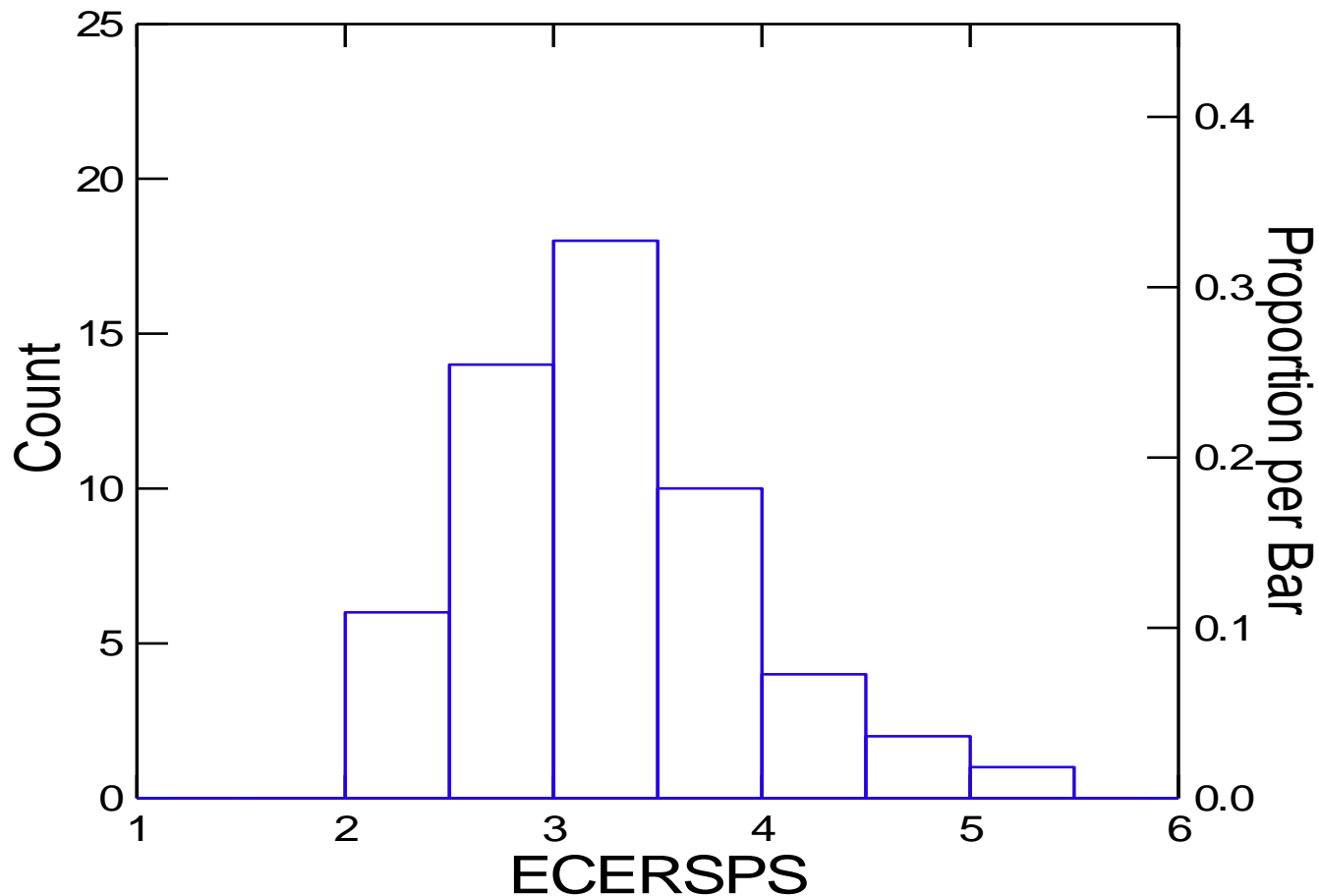
ECERS PRE-K Distribution

17



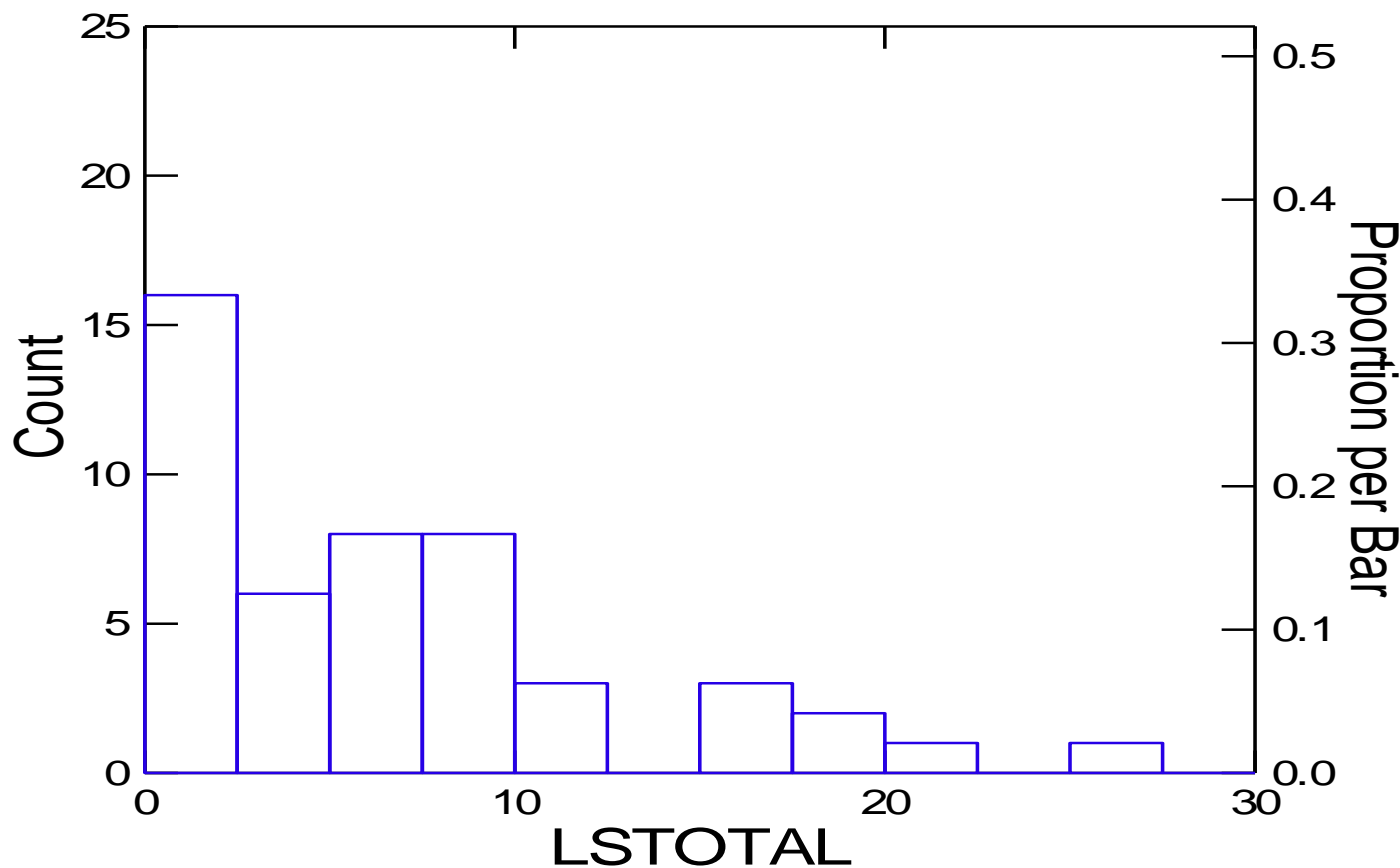
ECERS Child Care Distribution

18



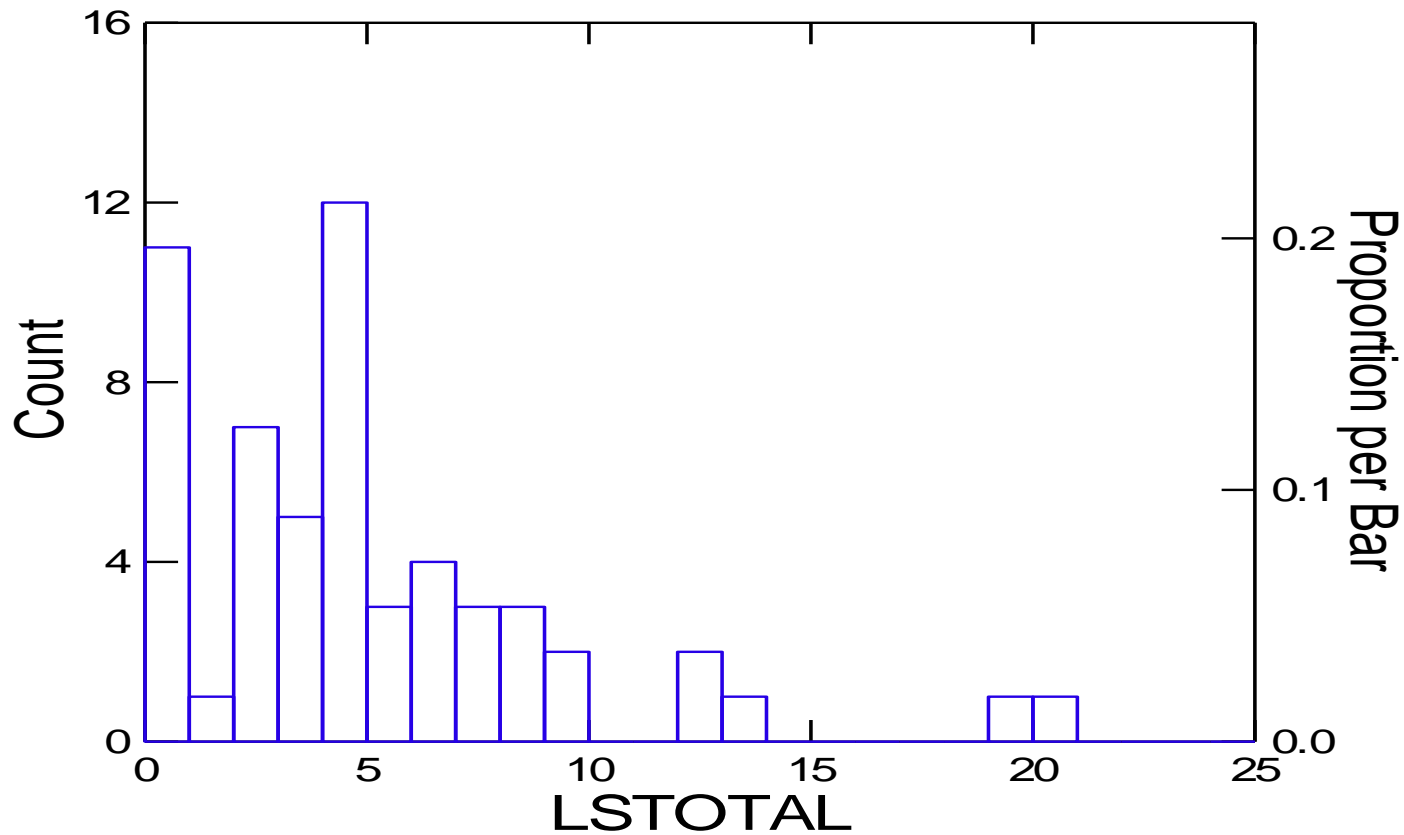
Licensing Scores for PRE-K

19



Licensing Scores for Child Care

20



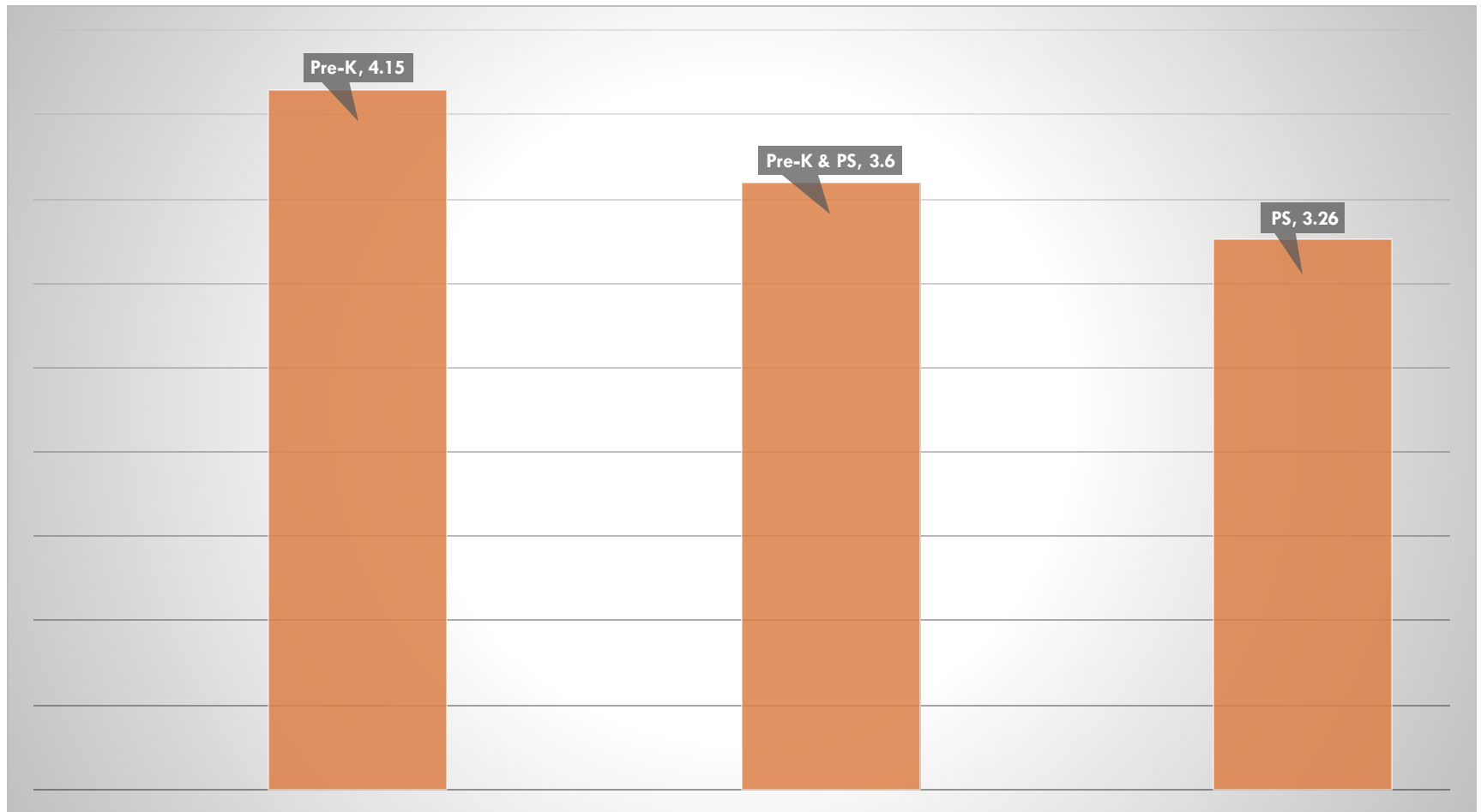
Impact of Pre-K & Higher Standards

21

- Pre-K only ECERS average = **4.15**
 - ▣ These are classrooms funded by Pre-K.
- Pre-K's impact on child care, ECERS average = **3.60**
 - ▣ These are classrooms not funded by Pre-K but in the same building as a Pre-K funded classroom.
- Child care only ECERS average = **3.26**
 - ▣ These are classrooms in programs that are not funded by Pre-K.

Impact of Pre-K on ECERS Scores

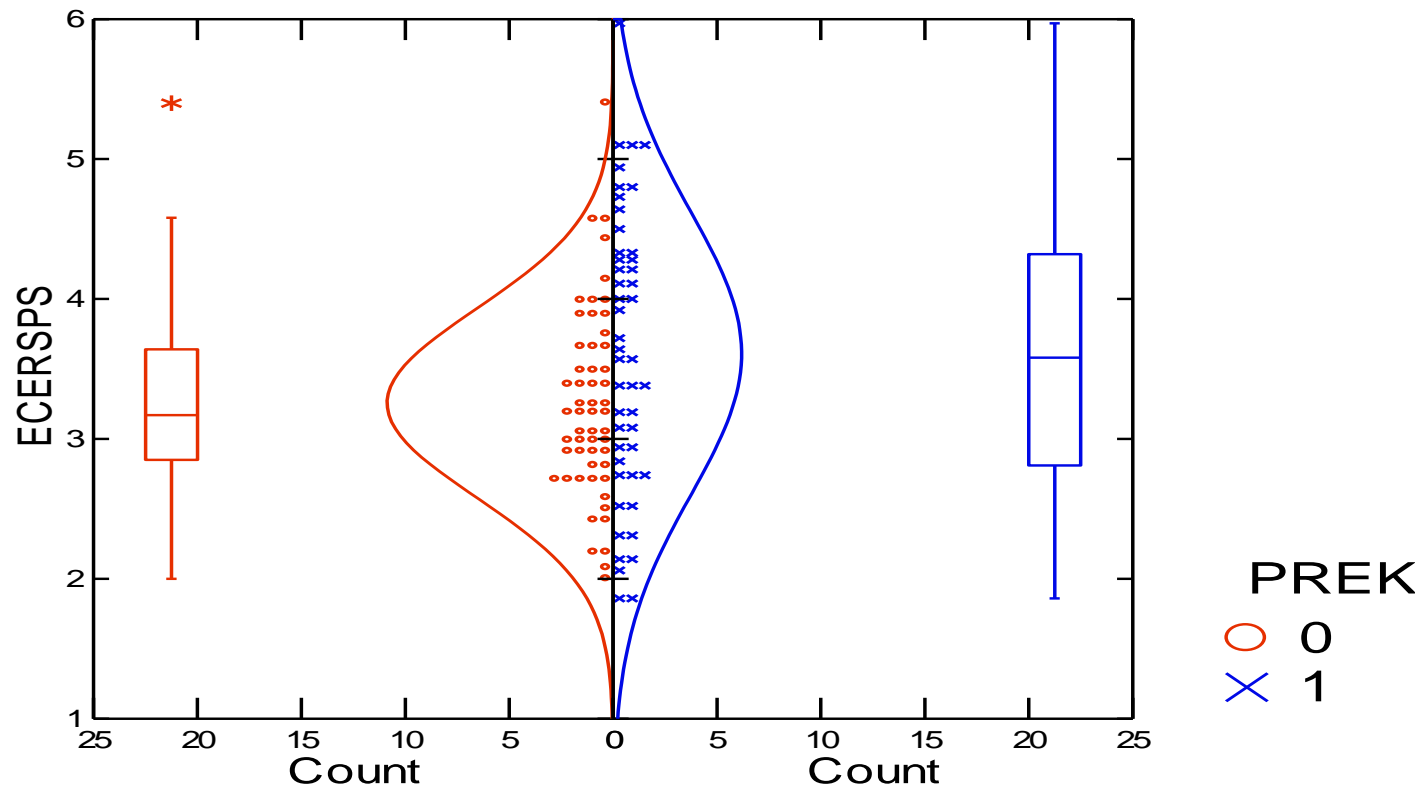
22



CC w/ & w/o Pre-K with ECERS Scores

23

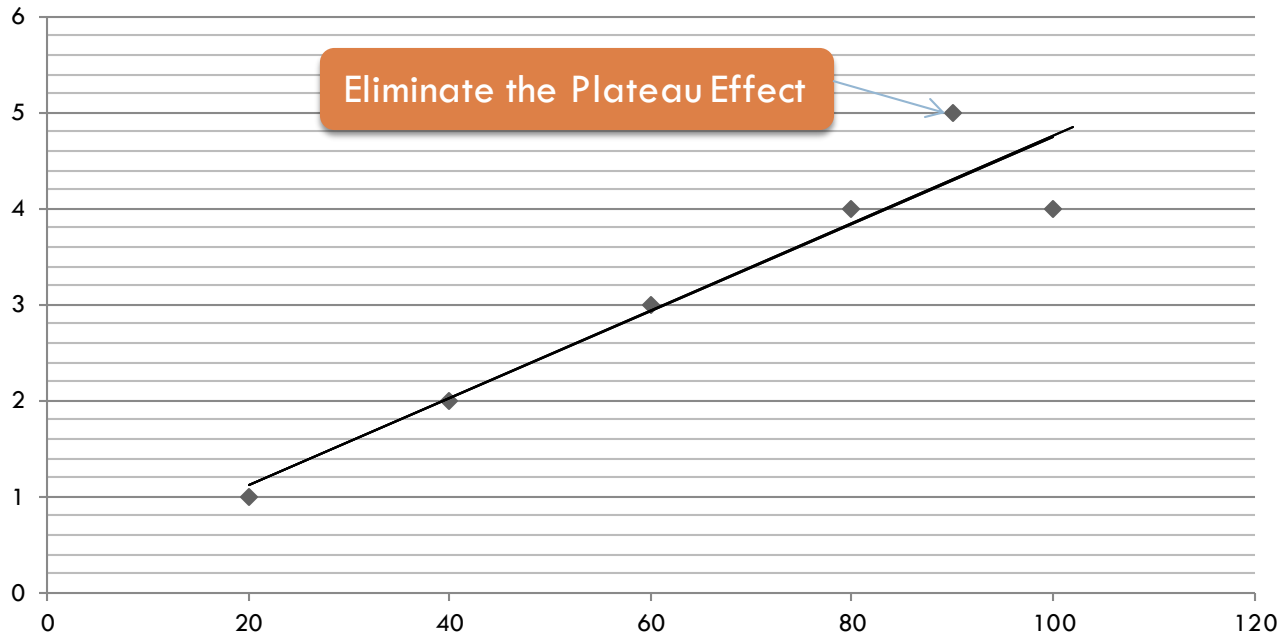
Two-sample t-test



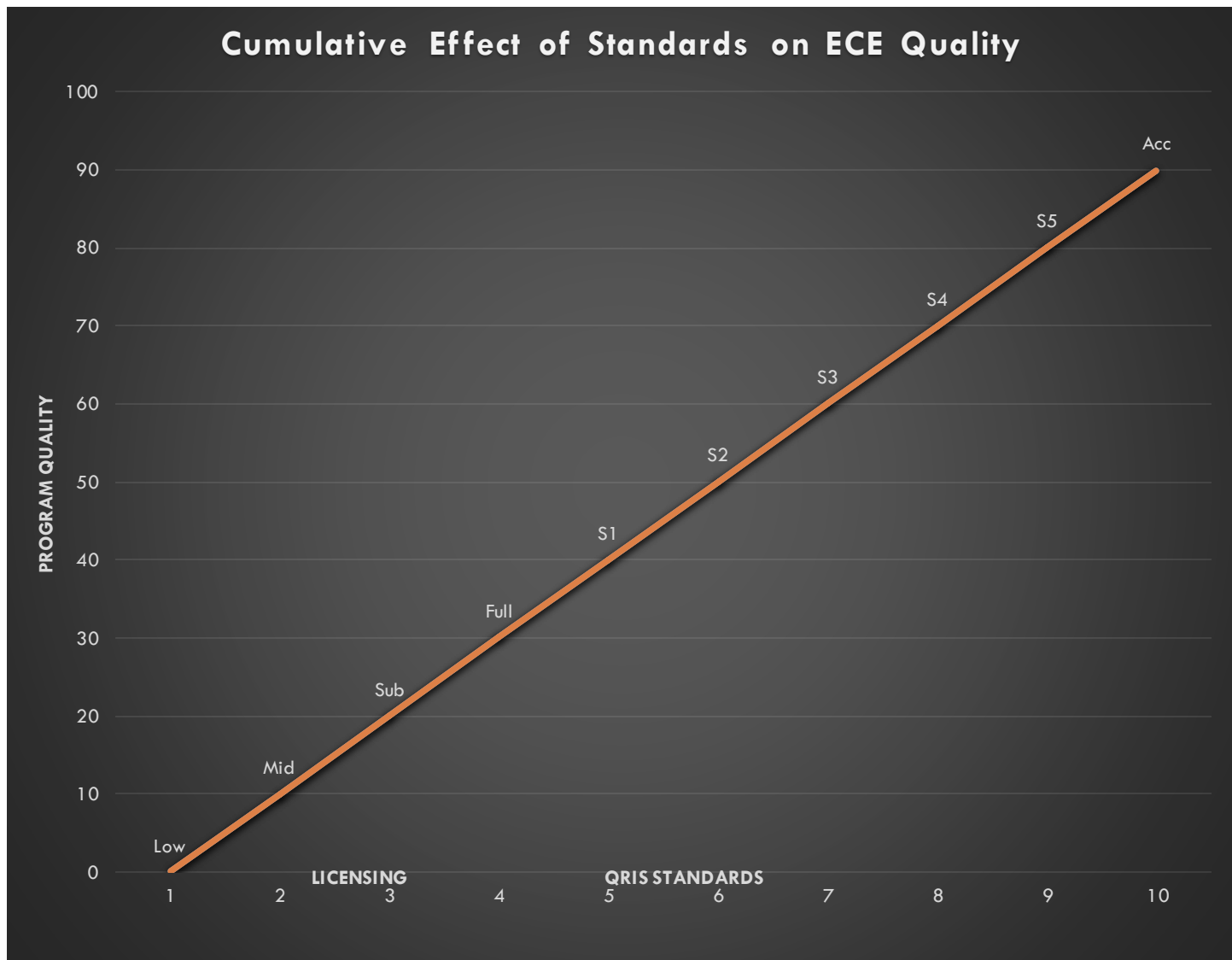
Relationship between PC (CI) & PQ

(Fiene & Nixon, 1985)(Fiene, 1985)(Fiene, 2013e)

PQ = ERS/CLASS



PC = % Rule Compliance



Regulatory Paradigms

26

Absolute (Class, 1957)

- **All rules are created equal.**
- **100% Compliance = Full License.**
- **PC + PQ = Linear.**
- **All rules are reviewed all the time.**

Relative/Differential (Fiene, 1985)

- **All rules are not created equal.**
- **Full 100% + Substantial Compliance = Full License.**
- **PC + PQ = Not Linear.**
- **Selected key rules are reviewed all the time.**

All Licensing Rules – Full Compliance Reviews

Differential Monitoring

How Often to Visit?

What is Reviewed?

Frequency

Abbreviated Tool

More Often

Less Often

Risk
Assessment
Weights

Key
Indicators
Predictors

DIFFERENTIAL MONITORING LOGIC MODEL & ALGORITHM (DMLMA©) (Fiene, 2012): A 4th Generation ECPQIM – Early Childhood Program Quality Indicator Model

$$CI \times PQ \Rightarrow RA + KI \Rightarrow DM + PD \Rightarrow CO$$

Definitions of Key Elements:

CI = Comprehensive Licensing Tool (Health and Safety)(*Caring for Our Children*)

PQ = *ECERS-R, FDCRS-R, CLASS, CDPEs* (Caregiver/Child Interactions/Classroom Environment)

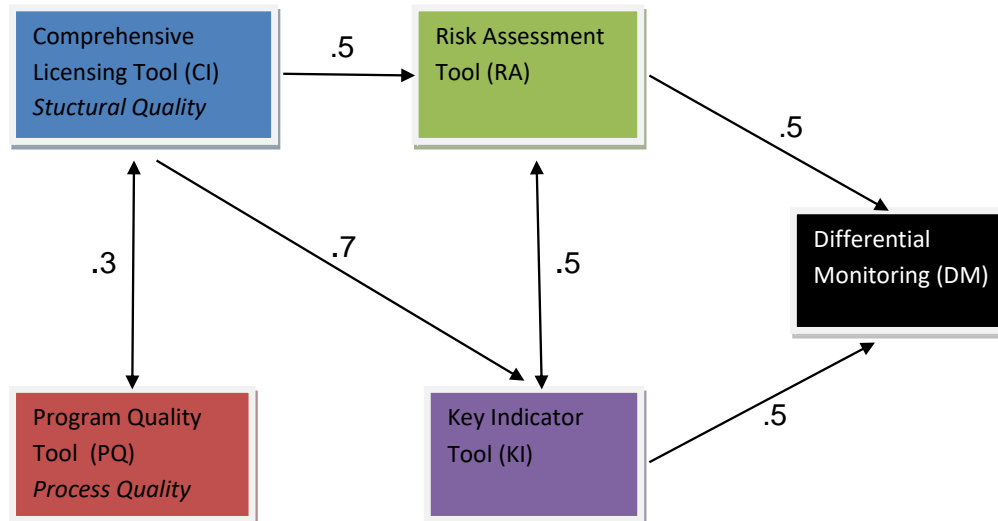
RA = Risk Assessment, (High Risk Rules)(*Stepping Stones*)

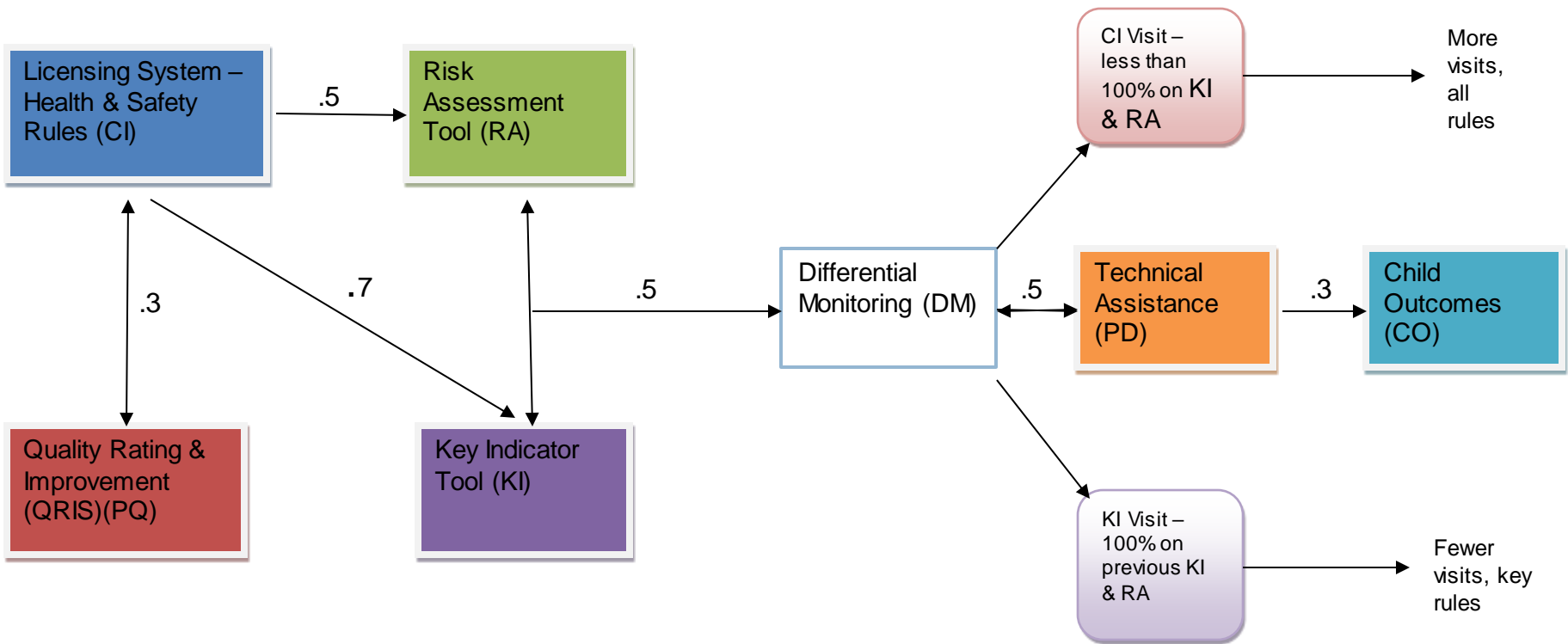
KI = Key Indicators (Predictor Rules)(*13 Key Indicators of Quality Child Care*)

DM = Differential Monitoring, (How often to visit and what to review)

PD = Professional Development/Technical Assistance/Training

CO = Child Outcomes (See Next Slide for PD and CO Key Elements)





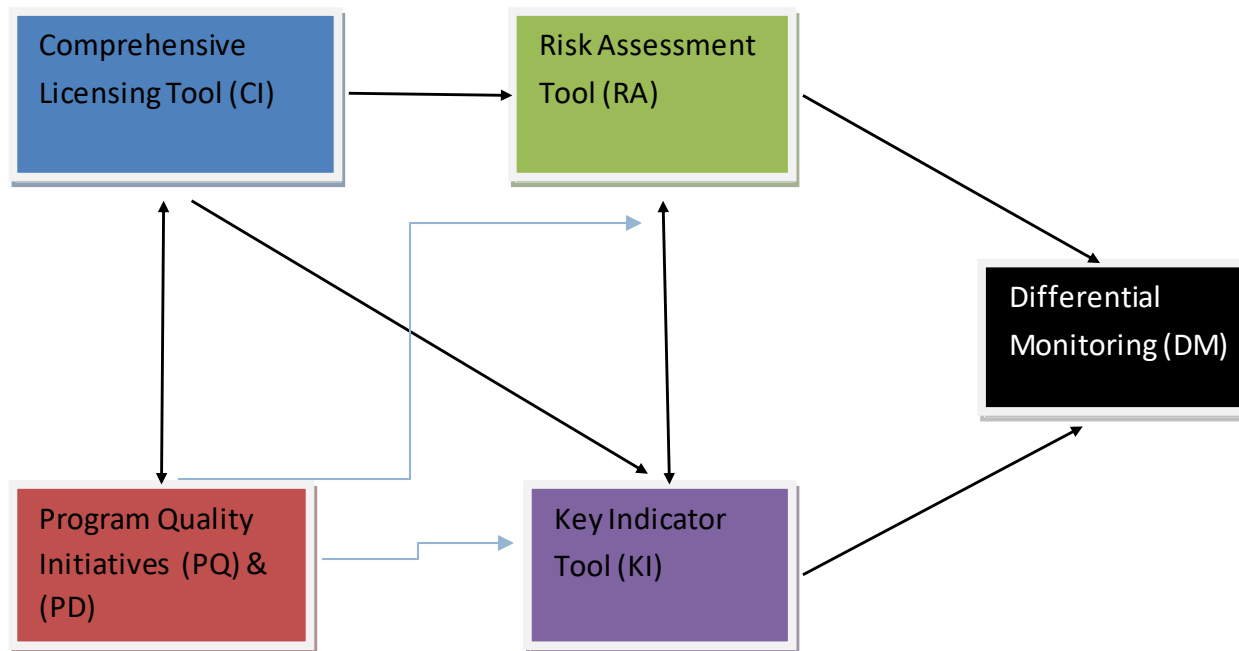
$$\sum CI \times \sum PQ \Rightarrow \sum RA + \sum KI \Rightarrow \sum DM + \sum PD \Rightarrow CO$$

DIFFERENTIAL MONITORING LOGIC MODEL & ALGORITHM (DMLMA®) (Fiene, 2014): A 4th Generation ECPQIM – Early Childhood Program Quality Indicator Model

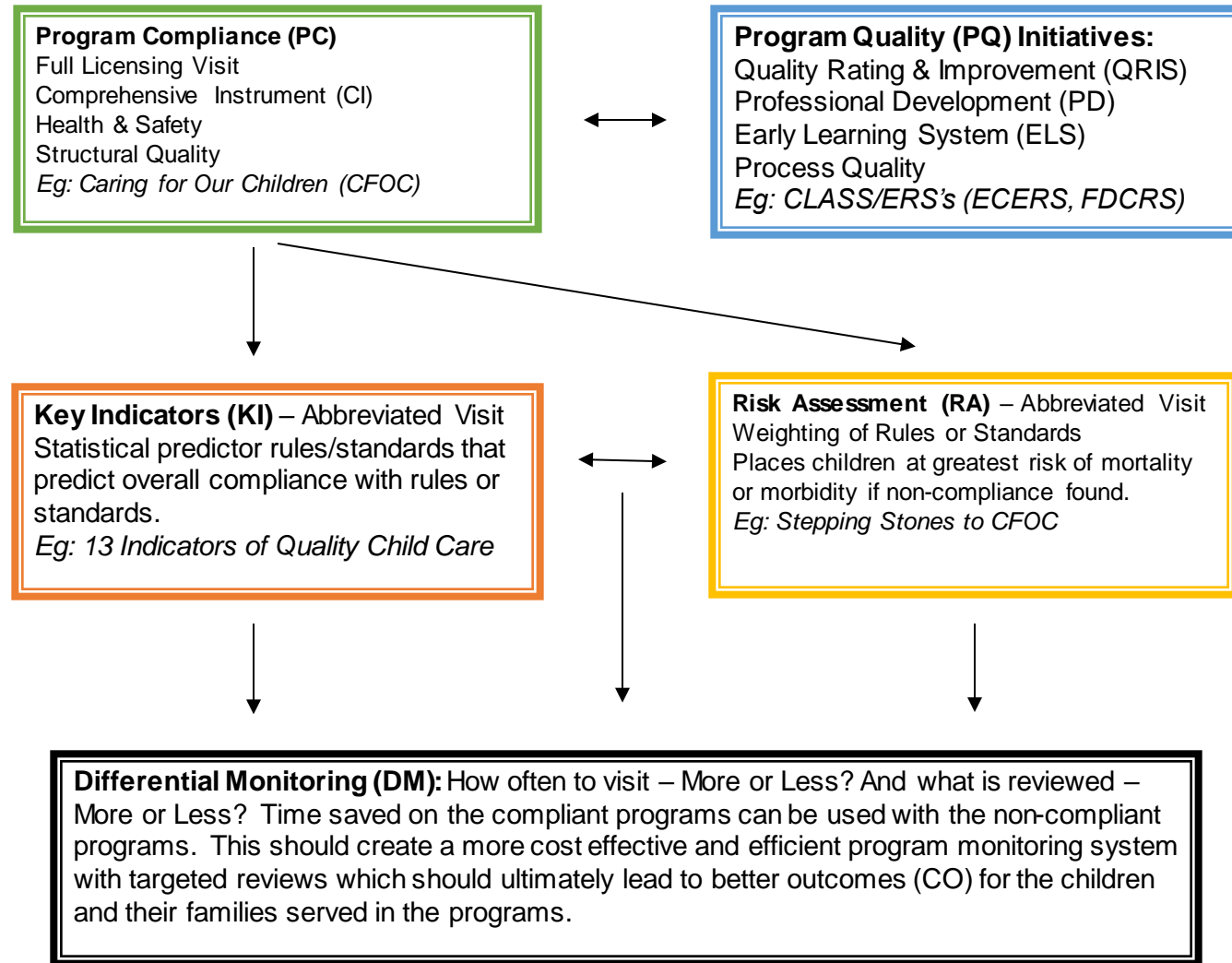
CI x PQ(PD) => RA + KI => DM => CO

Definitions of Key Elements:

CI = Comprehensive Licensing Tool (Health and Safety)(*Caring for Our Children*)(Structural Quality)
PQ= Program Quality Initiatives (*ECERS-R, FDCRS-R, CLASS, CDPES, QRIS, Accreditation*)(Process Quality)
PD = Program Quality Initiatives (cont) - Professional Development/Technical Assistance/Training
RA = Risk Assessment, (High Risk Rules/Standards)(*Stepping Stones*)
KI = Key Indicators (Predictor Rules/Standards)(*13 Key Indicators of Quality Child Care*)
DM = Differential Monitoring, (How often to visit and what to review)
CO = Child Outcomes (Developmental, Health, & Safety Outcomes)



Early Childhood Program Quality Indicator Model (ECPQIM4©): Differential Monitoring Logic Model (DMLM©)(Fiene, 2014)



Differential Monitoring Scoring Protocol (DMSP)©

Score	Systems Present
0	No systems in place.
2	KI or RA in place and not linked.
4	(KI & RA in place but not linked) or (PC + PQ are linked).
6	(KI & RA in place) & (KI + RA are linked).
8	(KI & RA in place but not linked) & ((PC + PQ) are linked).
10	All systems in place and linked.

10 POINTS

ALL SYSTEMS
IN PLACE
AND LINKED.

Example
HEAD START

8 POINTS

KI & RA IN
PLACE BUT
NOT LINKED;
AND PC & PQ
LINKED.

Example
Georgia

6 POINTS

KI & RA IN
PLACE &
LINKED.

Examples
Illinois
New York

4 POINTS

KI & RA IN
PLACE BUT
NOT LINKED
OR PC & PQ
LINKED.

Example
None

2 POINTS

KI OR RA IN
PLACE.

Examples
Colorado
Kansas

0 POINTS

NO SYSTEMS

Differential Monitoring Scoring Protocol (DMSP)©

Point Assignment

Score	Systems Present and Point Assignment
0	No systems in place.
2	(KI (1)) & (KI -> DM (1)) or ((RA (1)) & (RA -> DM (1)))
4	(PC + PQ (4)) or (KI (1) & (KI -> DM (1)) & (RA (1) & (RA -> DM (1)))
6	(KI + RA -> DM (4)) & (KI (1)) & (RA (1))
8	(KI (2) & RA (2)) & (PC + PQ (4)).
10	(KI + RA -> DM (4)) & (KI (1)) & (RA (1)) & (PC + PQ (4))

KI (Key Indicators); RA (Risk Assessment); PC (Program Compliance/Licensing); PQ (Program Quality Initiatives); DM (Differential Monitoring).

SYSTEMS (pts)	MODEL	GA	NY	HS	IL	KS	CO
KI (1)	1	-	1	1	1	1	1
RA (1)	1	1	1	1	1	-	-
KI + RA -> DM (4)	4	2	4	4	4		
KI + RA (2)							
PC + PQ (4)	4	4	-	4	-	-	-
KI -> DM (1)						1	1
RA -> DM (1)		1				-	-
TOTAL (10)	10	8	6	10	6	2	2

ECE Regulatory Compliance Scale

36

- **7 = 0 Violations. 100% regulatory compliance, Full Compliance with all rules/regulations.**
- **5 = 1-3 Violations. Substantial regulatory compliance with all rules/regulations.**
- **3 = 4-9 Violations. Mediocre regulatory compliance with all rules/regulations.**
- **1 = 10+ Violations. Non-Optimal/Low regulatory compliance with all rules/regulations.**

Regulatory Compliance Scale (RCS)

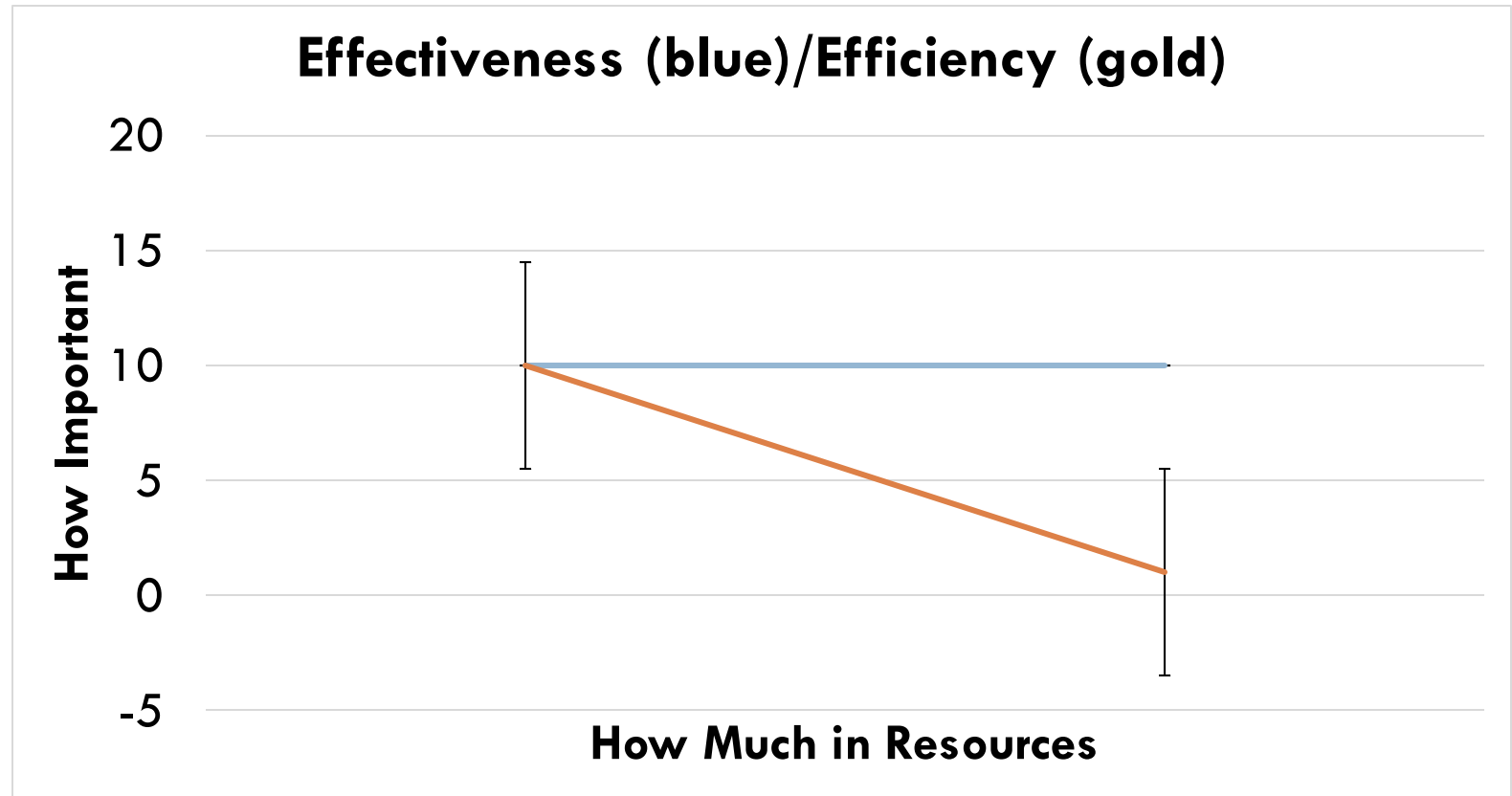
37

Regulatory Compliance Scale Levels	Definitions & Compliance Levels	Number of Rule Violations
7	Full 100% Compliance	0 Violations
5	Substantial Compliance	1-3 Violations
3	Mediocre Compliance	4-9 Violations
1	Low/Non-Optimal Compliance	10+ Violations

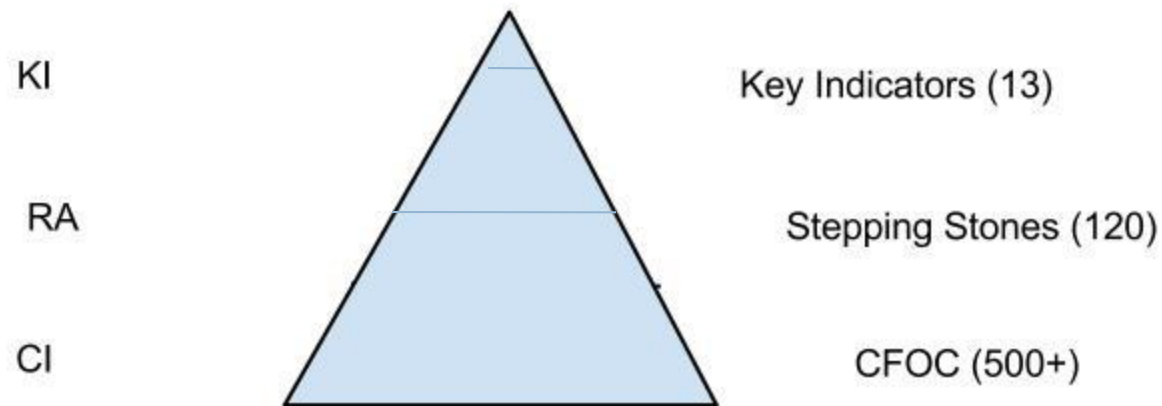
Program Monitoring

Effectiveness/Efficiency Relationship

38

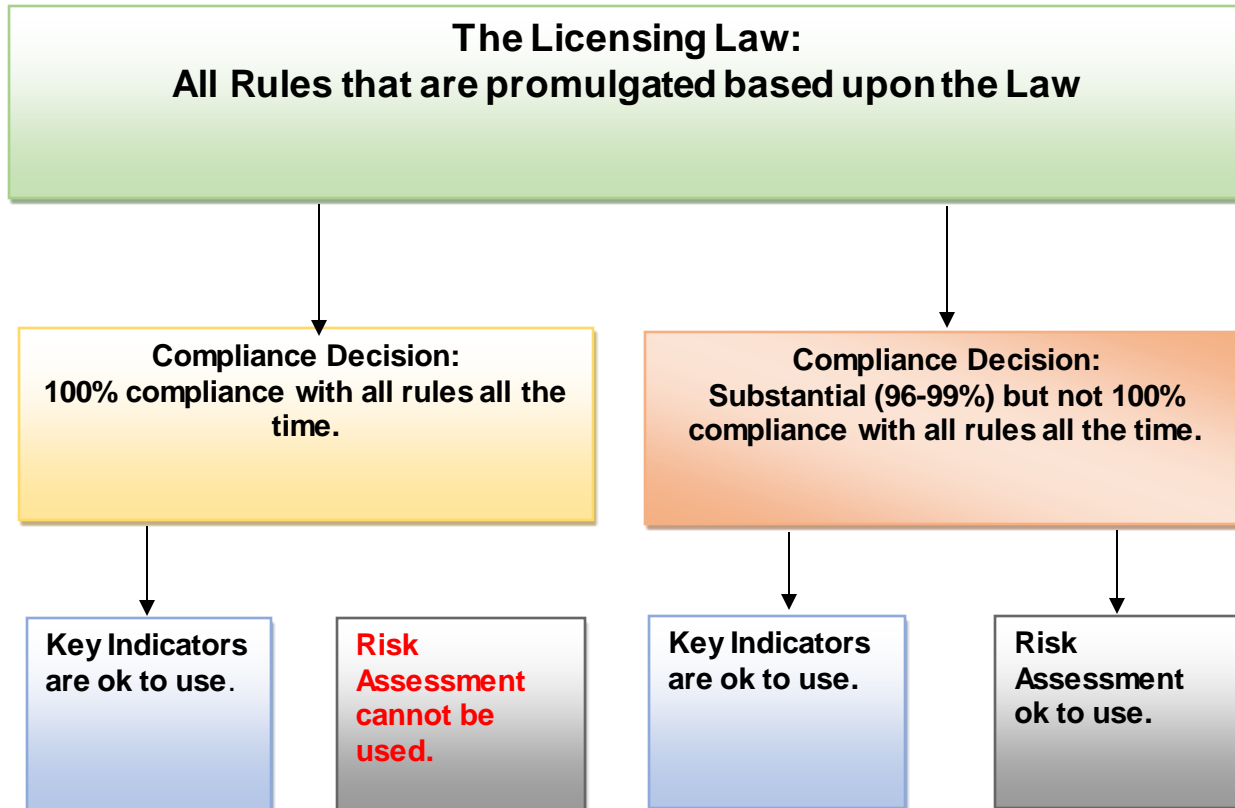


Relationship of Key Indicators (KI), Stepping Stones (RA), and Caring for Our Children
(CFOC)(CI)



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.

When Key Indicators and Risk Assessments Can Be Used



**Relationship of Health and Safety Rules/Regulations, Standards, and Guidelines in Early Care and Education
by using the Caring for Our Children Publications**

*ASPE
Key Indicators. 13
Standards*

*Caring for Our Children: Basics as the risk
assessment/key indicator tool. 55 Standards.*

*Stepping Stones as the risk assessment tool based
upon morbidity/mortality. 138 Standards.*

*Caring for Our Children standards/guidelines as the comprehensive set of health and safety
standards/guidelines for the early care and education field. 650 Standards.*

Validation Approaches (Zellman & Fiene, 2012)

42

- **First Approach (Standards)**
 - ▣ **CI x *Caring for Our Children/Stepping Stones/13 Key Indicators of Quality Child Care***
- **Second Approach (Measures)**
 - ▣ **CI x RA + KI x DM**
- **Third Approach (Outputs)**
 - ▣ **PQ x CI**
- **Fourth Approach (Outcomes)**
 - ▣ **CO = PD + PQ + CI + RA + KI**

DMLMA© Expected Thresholds

43

DMLMA© Expected Thresholds

□ **.70+**

□ **.50+**

□ **.30+**

DMLMA© Key Elements Examples

□ **CI x KI**

□ **RA x CI; RA x DM; RA x KI; DM x KI; DM x PD**

□ **PQ x CI; PQ x CO; RA x CO; KI x CO; CI x CO**

DMLMA Expected Thresholds Matrix*

44

	PQ	RA	KI	DM	PD	CO
CI	0.3	0.5	0.7	0.5	0.5	NS
PQ				0.3	0.3	NS
RA			0.5	0.5	0.5	0.3
KI				0.5	0.5	0.3
DM					0.5	
PD						0.4

Interpretation of Inter-Correlations

45

- Based upon recent research, the relationships between H&S (CI)(PC) and QRIS (PQ) standards and Child Outcomes (CO) is difficult to find significance.
- The relationship between Professional Development (PD) and staff interactions with Child Outcomes (CO) appear to be the significant relationship that should be explored as a Quality Intervention.
- If we want to explore H&S and QRIS standards significant relationships we may need to look at children's health & safety outcomes.

A Validation Study: State Example (Fiene, 2013e)

46

Validation Approach/Research Question	CCC Actual (Expected*)	FCC Actual (Expected)
1 STANDARDS/Key Indicators	VALIDATED	VALIDATED
KI x CR	.49 (.50+)	.57 (.50+)
KI x LS	.78 (.70+)	.87 (.70+)
2 MEASURES/Core Rules/ACDW	VALIDATED	VALIDATED
CR x LS	.69 (.50+)	.74 (.50+)
CR x ACDW	.76 (.50+)	.70 (.50+)
3 OUTPUTS/Program Quality	VALIDATED	NOT VALIDATED
ECERS-R/PK x LS	.37 (.30+)	FDCRS x LS .19 (.30+)
ECERS-R/PS x LS	.29 (.30+)	-----
ECERS-R/PK x CR	.53 (.30+)	FDCRS x CR .17 (.30+)
ECERS-R/PS x CR	.34 (.30+)	-----

*See below for the expected r values for the DMLMA© thresholds which indicate the desired correlations between the various tools.

DMLMA© Thresholds:

High correlations (.70+) = LS x KI.

Moderate correlations (.50+) = LS x CR; CR x ACDW; CR x KI; KI x ACDW.

Lower correlations (.30+) = PQ x LS; PQ x CR; PQ x KI.

Validation of Key Indicator Systems

47

Figure 1	Providers who fail the Key Indicator review	Providers who pass the Key Indicator review	Row Totals
Providers who fail the Comprehensive review	W	X	
Providers who pass the Comprehensive Review	Y	Z	
Column Totals			Grand Total

Annotations for Figure 1

48

- A couple of annotations regarding Figure 1.
- $W + Z$ = the number of agreements in which the provider passed the Key Indicator review and also passed the Comprehensive review.
- X = the number of providers who passed the Key Indicator review but failed the Comprehensive review. This is something that should not happen, but there is always the possibility this could occur because the Key Indicator Methodology is based on statistical methods and probabilities. We will call these False Negatives (FN).
- Y = the number of providers who failed the Key Indicator review but passed the Comprehensive review. Again, this can happen but is not as much of a concern as with “ X ”. We will call these False Positives (FP).

National Validation Data

49

Figure 2	Providers who fail the Key Indicator review	Providers who pass the Key Indicator review	Row Total
Providers who fail the Comprehensive review	25	1	26
Providers who pass the Comprehensive Review	7	17	24
Column Total	32	18	50

Formula for Agreement Ratio

50

- To determine the agreement ratio, we use the following formula:

$$\frac{A}{A + D}$$

- Where A = Agreements and D = Disagreements.
- Based upon Figure 2, A + D = 42 which is the number of agreements; while the number of disagreements is represented by B = 1 and C = 7 for a total of 8 disagreements. Putting the numbers into the above formula:

$$\frac{42}{42 + 8}$$

Or

$$.84 = \text{Agreement Ratio}$$

- The False Positives (FP) ratio is .14 and the False Negatives (FN) ratio is .02. Once we have all the ratios we can use the ranges in Figure 3 to determine if we can validate the Key Indicator System. The FP ratio is not used in Figure 3 but is part of the Agreement Ratio.

Thresholds for Validating Key Indicators for Licensing Rules

51

<input type="checkbox"/> <u>Agreement Ratio Range</u>	<u>False Negative Range</u>	<u>Decision</u>
<input type="checkbox"/> (1.00) – (.90)	.05+	Validated
<input type="checkbox"/> (.89) – (.85)	.10 - .06	Borderline
<input type="checkbox"/> (.84) – (.00)	.11 or more	Not Validated

Differential Monitoring Model

52

□ Key Elements

- **Program Compliance (PC)** generally represented by a state's child care licensing health & safety system or at the national level by ***Caring for Our Children***.
- **Program Quality (PQ)** generally represented by a state's QRIS, or at the national level by Accreditation (***NAEYC, NECPA***), ***Head Start Performance Standards, Environmental Rating Scales, CLASS***, etc..
- **Risk Assessment (RA)** generally represented by a state's most critical rules in which children are at risk of mortality or morbidity, or at the national level by ***Stepping Stones***.

Differential Monitoring Model (cont)

53

□ Key elements (continued)

- **Key Indicators (KI)** generally represented by a state's abbreviated tool of statistically predictive rules or at the national level by ***13 Indicators of Quality Child Care*** and ***NACCRRA's We CAN Do Better Reports***.
- **Professional Development (PD)** generally represented by a state's technical assistance/training/professional development system for staff.
- **Child Outcomes (CO)** generally represented by a state's ***Early Learning Network Standards***.

Differential Monitoring Benefits

54

- **Differential Monitoring (DM)** benefits to the state are the following:
 - ▣ Systematic way of tying distinct state systems together into a cost effective & efficient unified valid & reliable logic model and algorithm.
 - ▣ Empirical way of reallocating limited monitoring resources to those providers who need it most.
 - ▣ Data driven to determine how often to visit programs and what to review, in other words, should a comprehensive or abbreviated review be completed.

Program Compliance/Licensing (CI)(PC)

55

- **These are the comprehensive set of rules, regulations or standards for a specific service type.**
- ***Caring for Our Children (CFOC)* is an example.**
- ***Head Start Performance Standards* is an example.**
- **Program meets national child care benchmarks from NACCRRA's *We CAN Do Better* Report.**
- **No complaints registered with program.**
- **Substantial to full compliance with all rules.**

Advantages of Instrument Based Program Monitoring (IPM)

56

- ❑ **Cost Savings**
- ❑ **Improved Program Performance**
- ❑ **Improved Regulatory Climate**
- ❑ **Improved Information for Policy and Financial Decisions**
- ❑ **Quantitative Approach**
- ❑ **State Comparisons**

State Example of Violation Data (Fiene, 2013d)

57

Violation Data in Centers and Homes by Regional Location

Region	Centers		Homes	
	Violations*	Number	Violations*	Number
1	9.30	109	2.42	117
2	8.32	191	4.63	120
3	5.31	121	3.94	138
4	5.57	61	3.02	125

* = Average (Means)

Violation Data in Centers and Homes by Type of Licensing Inspection

License Type	Centers		Homes	
	Violations*	Number	Violations*	Number
Initial	7.44	36	3.35	20
Renewal	7.07	368	3.53	469
Amendment	9.51	55	4.00	2
Correction	6.71	14	3.00	8
Temporary	11.22	9	4.00	1

* = Average (Mean)

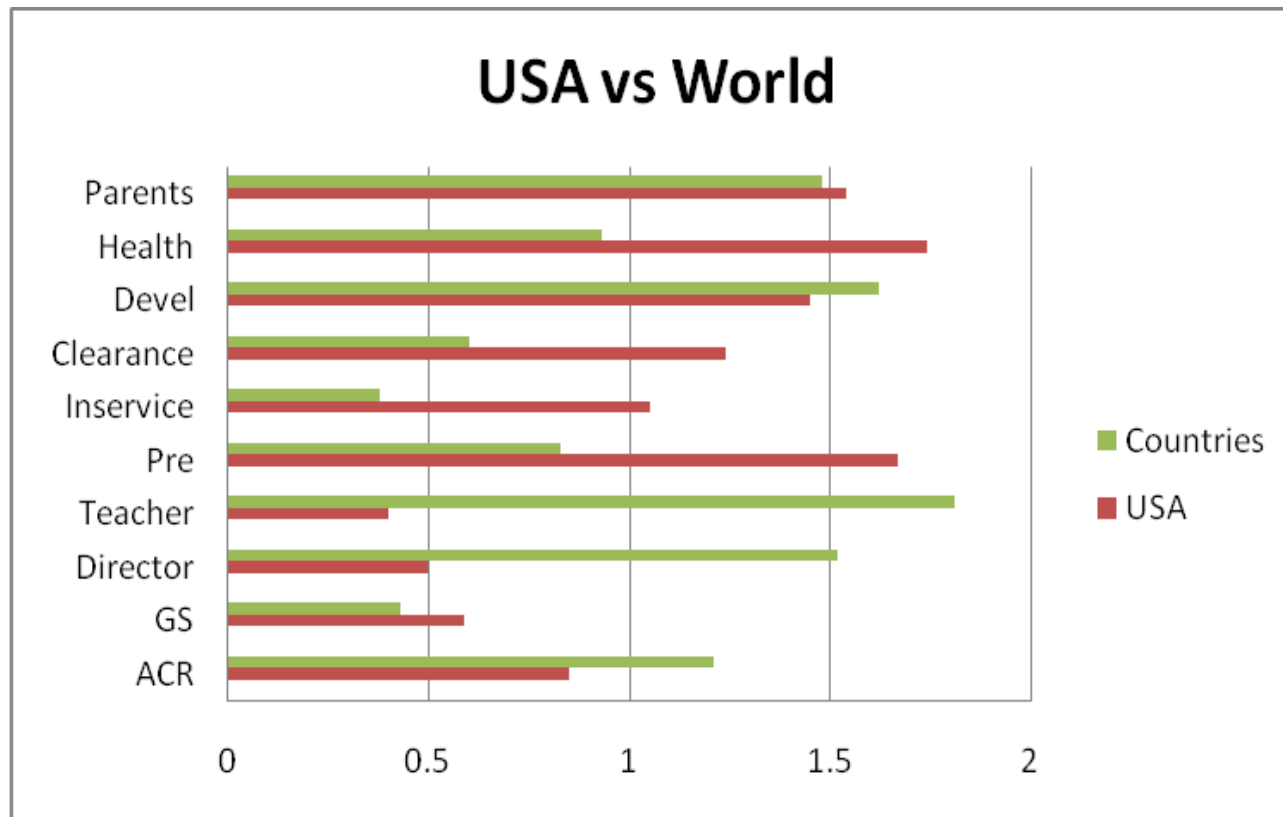
Head Start: Content Area Correlations (Fiene, 2013c)

58

		<u>CHS</u>	<u>ERSEA</u>	<u>FCE</u>	<u>FIS</u>	<u>GOV</u>	<u>SYS</u>
CDE		.33**	.26**	.06ns	.14**	.13*	.33**
CHS			.29**	.18**	.09ns	.25**	.51**
ERSEA				.15**	.10*	.27**	.38**
FCE					.01ns	.17**	.23**
FIS						.13*	.23**
GOV							.38**

International Study of Child Care Rules (Fiene, 2013a)

59



International Study Benchmarks

60

Benchmark	Countries	USA	Significance
ACR (R1)	1.1220	0.8462	not significant
GS (R2)	0.4063	0.5865	not significant
Director (R3)	1.5625	0.5000	$t = 7.100; p < .0001$
Teacher (R4)	1.6563	0.4038	$t = 7.632; p < .0001$
Preservice (R5)	0.9375	1.6731	$t = 4.989; p < .001$
Inservice (R6)	0.6563	1.0481	$t = 2.534; p < .02$
Clearances (R7)	0.6094	1.2404	$t = 3.705; p < .01$
Development (R8)	1.6406	1.4519	not significant
Health (R9)	0.9844	1.7404	$t = 6.157; p < .0001$
Parent (R10)	1.5000	1.5385	not significant

Parent = Parent Involvement (R10)

Health = Health and safety recommendations (R9)

Development = Six developmental domains (R8)

Clearances = Background check (R7)

Inservice = 24 hours of ongoing training (R6)

Preservice = Initial orientation training (R5)

Teacher = Lead teacher has CDA or Associate degree (R4)

Director = Directors have bachelor's degree (R3)

GS = Group size NAEYC Accreditation Standards met (R2)

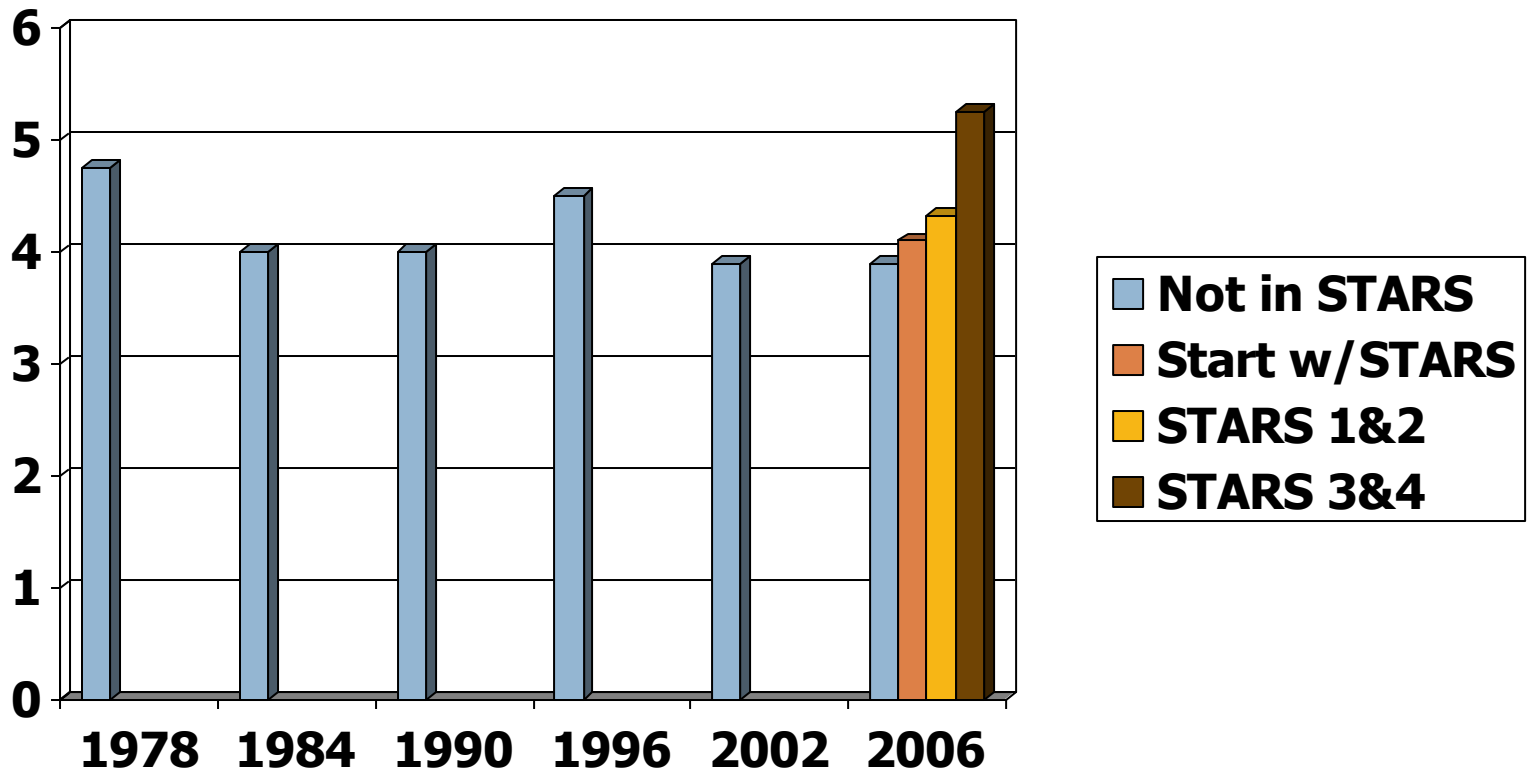
ACR = Staff child ratios NAEYC Accreditation Standards met (R1)

Program Quality (PQ)

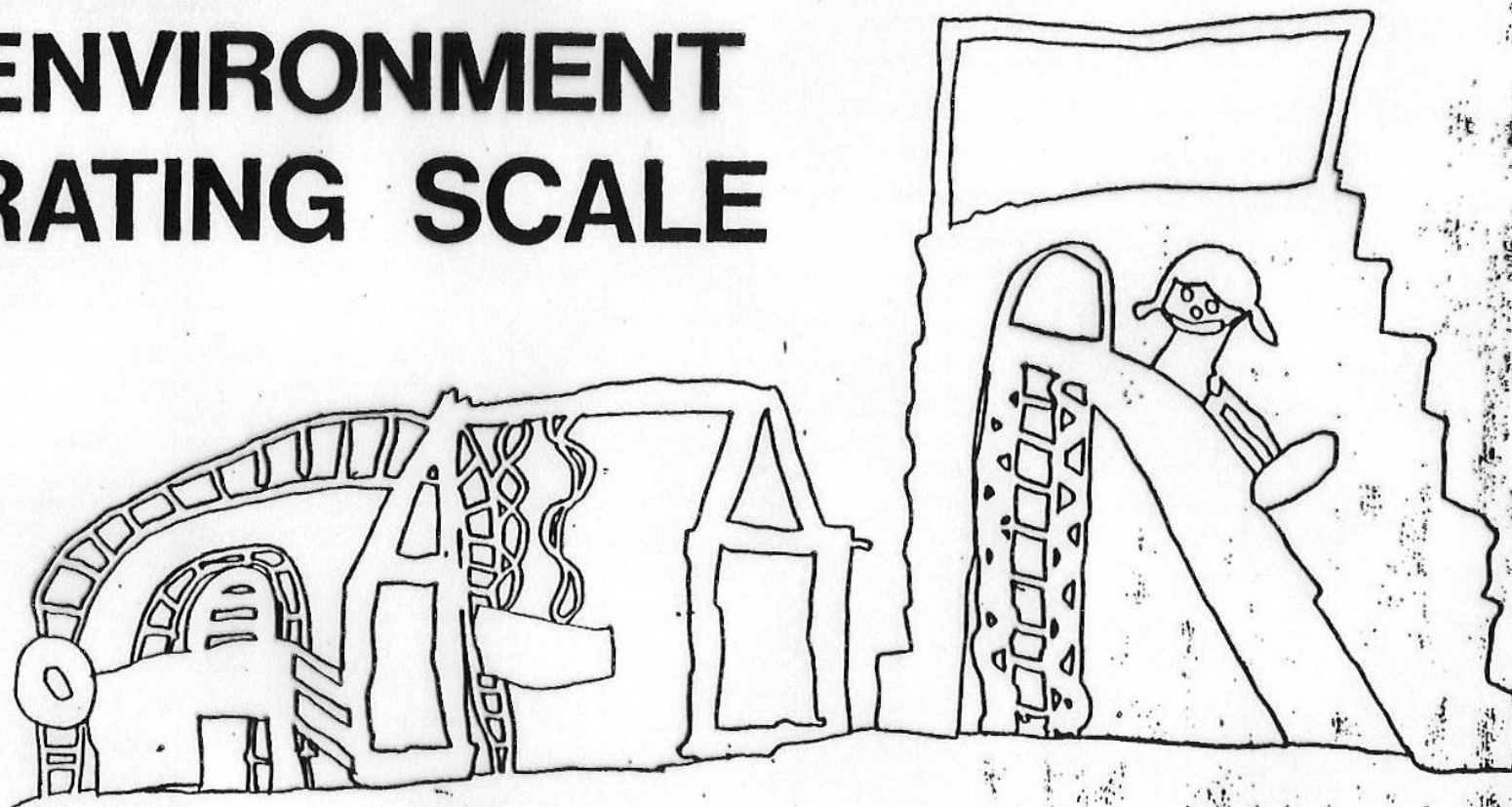
61

- ❑ **Generally Quality Rating and Improvement Systems (QRIS) and/or Accreditation systems either used separately or together.**
- ❑ **Program has attained at least a 5 on the various ERS's or an equivalent score on the CLASS.**
- ❑ **Program has moved through all the star levels within a five year timeframe.**
- ❑ **Percent of programs that participate.**
- ❑ **Generally PQ builds upon PC/Licensing system.**

Keystone STARS ECERS Comparisons to Previous Early Childhood Quality Studies (Barnard, Smith, Fiene & Swanson (2006))



EARLY CHILDHOOD ENVIRONMENT RATING SCALE



THELMA HARMS

RICHARD M. CLIFFORD

Name of Facility		Room	Age of Children youngest to oldest	Name of Rater	Position of Rater	Date
1. Greeting/departing 1 2 3 4 5 6 7	3. Nap/rest 1 2 3 4 5 6 7	5. Personal grooming 1 2 3 4 5 6 7	7. or ♦ 7. Furnishings (learning) 1 2 3 4 5 6 7	9. Room arrangement 1 2 3 4 5 6 7	11. Understanding language 1 2 3 4 5 6 7	
2. or ♦ 2. Meals/snacks 1 2 3 4 5 6 7	4. Diapering/toileting 1 2 3 4 5 6 7	Total Personal Care (Items 1-5)	8. Furnishings (relaxation) 1 2 3 4 5 6 7	10. or ♦ 10. Child related display 1 2 3 4 5 6 7	12. Using language 1 2 3 4 5 6 7	
		6. Furnishings (routine) 1 2 3 4 5 6 7		Total Furnishings/display (Items 6-10)		

ECERS/FDCRS By Type of Setting (Fiene, etal (2002)

65

<input type="checkbox"/> Head Start	4.9
<input type="checkbox"/> Preschool	4.3
<input type="checkbox"/> Child Care Centers	3.9
<input type="checkbox"/> Group Child Care Homes	4.1
<input type="checkbox"/> Family Child Care Homes	3.9
<input type="checkbox"/> Relative/Neighbor Care	3.7

ECERS Distribution By Type of Service—Head Start (HS), Child Care Center (CC), Preschool (PS)

66

	HS	CC	PS
Minimal (3.99 or less)	8%	62%	35%
Adequate (4.00-4.99)	46%	23%	44%
Good (5.00 or higher)	46%	15%	21%

ECERS/FDCRS and Education of the Provider

67

<input type="checkbox"/> High School Diploma (24%)	3.8
<input type="checkbox"/> Some College (24%)	4.1
<input type="checkbox"/> Associate's Degree (17%)	4.2
<input type="checkbox"/> Bachelor's Degree (31%)	4.3
<input type="checkbox"/> Master's Degree (4%)	4.7

NECPA/ERS's/QRIS (Fiene, 1996)

68

	STAR 1	STAR 2	STAR 1 and 2 Combined	STAR 3	STAR 4
NECPA Score (without Infant/Toddler Section)	n = 21 Mean = 647.04 Range: 408.99 to 887.54 s.d.: 163.79	n = 4 Mean: 648.1 Range: 365.84 to 881.93 s.d.: .220.87	n = 25 Mean: 647.21 Range: 365.84 to 887.54 s.d.: .168.69	n = 2 Mean: 824.27 Range: 789.13 to 859.40 s.d.: .49.69	n = 23 Mean: 752.93 Range: 427.36 to 894.32 s.d.: 132.12
ECERS-R Score	n = 20 Mean: 3.92 Range: 2.40 to 5.68 s.d.: .97	n = 4 Mean: 3.52 Range: 3.45 to 3.66 s.d.: .094	n = 24 Mean: 3.86 Range: 2.40 to 5.68 s.d.: .896	n = 2 Mean: 5.67 Range: 5.45 to 5.88 s.d.: .304	n = 23 Mean: 5.35 Range: 2.95 to 6.36 s.d.: .867
NECPA Score (Infant/Toddler Only)	n = 6 Mean: 83.50 Range: 59 to 138 s.d.: 30.81	n = 1 Mean: 79.0	n = 7 Mean: 82.86 Range: 59.0 to 138.0 s.d.: 28.17	n = 0	n = 7 Mean: 134.0 Range: 102.0 to 163.0 s.d.: 21.66
ITERS-R	n = 9 Mean: 3.72 Range: 2.81 to 5.22 s.d.: .706	n = 1 Mean: 5.01	n = 10 Mean: 3.85 Range: 2.81 to 5.22 s.d.: .781	n = 1 Mean: 4.29	n = 12 Mean: 5.15 Range: 3.21 to 6.39 s.d.: .821

PC/PQ Conceptual Similarities

69

- ❑ **100% Compliance with child care health & safety rules = QRIS Block System.**
- ❑ **Substantial but not 100% Compliance with child care health & safety rules = QRIS Point System.**
- ❑ **Both Licensing (PC) and QRIS (PQ) use rules/standards to measure compliance. Licensing rules are more structural quality while QRIS standards have a balance between structural and process quality.**

Determining Compliance

70

- **Risk assessment**
- –Identify requirements where violations pose a greater risk to children, e.g., serious or critical standards
- –Distinguish levels of regulatory compliance
- –Determine enforcement actions based on categories of violation
- –*Stepping Stones to Caring for Our Children is an example of risk assessment (AAP/APHA/NRC, 2013)*
- **Key indicators**
- –Identify a subset of regulations from an existing set of regulations that statistically predict compliance with the entire set of regulations
- –Based on work of Dr. Richard Fiene (2002) – 13 indicators of quality
- –“Predictor rules”

National Center on Child Care Quality Improvement, Office of Child Care

Risk Assessment (RA)

71

- ❑ Risk Assessment (RA) are those rules which place children at greatest risk of mortality or morbidity.
- ❑ *Stepping Stones* is example of Risk Assessment Tool and Approach.
- ❑ When Risk Assessment (RA) and Key Indicators (KI) described in next slide are used together, most cost effective and efficient approach to program monitoring.
- ❑ 100% compliance with RA rules.

State Example of Risk Assessment Tool

72

CCLC / GDCH ANNUAL COMPLIANCE DETERMINATION WORKSHEET																				
DATE:					CONSULTANT NAME:															
FACILITY NAME:					FACILITY ADDRESS:															
<p><u>Instructions:</u> Enter visit(s) date and type in the grid below. Place an "X" in the box for any core rule category cited, at the appropriate risk level. When multiple risk levels are cited under one category, only the highest level of risk for that category should be listed on the grid below. Total the number of categories cited at each risk level at the bottom. Then list the total number of "Low", "Medium", "High", and "Extreme" from all visits in the appropriate boxes below. Using the guidelines listed below, determine the facility's compliance, and fill it in the box labeled "Annual Compliance Determination". Any non-core rule violations issued due to an injury or serious incident will be equivalent to a high-risk core rule category citation, and will be treated in the same way when determining a facility's compliance. Please note these instances in the comment section.</p>																				
	Visit date / type:				Visit date / type:				Visit date / type:				Visit date / type:				Visit date / type:			
Core Rules	Low	Med	High	Extreme	Low	Med	High	Extreme	Low	Med	High	Extreme	Low	Med	High	Extreme	Low	Med	High	Extreme
Diapering- .10																				
Discipline- .11																				
Hygiene- .17																				
Infant Sleep Safety- .45																				
Medication- .20																				
Physical Plant- .25(13)																				
Playgrounds- .26																				
Staff:Child Ratios- .32(1) & (2)																				
Supervision- .32(6)																				
Swimming- .35																				
Transportation- .36																				
Field Trips- .13																				
TOTALS																				
TOTAL LOW:					TOTAL MEDIUM:					TOTAL HIGH:										
ANNUAL COMPLIANCE DETERMINATION:																				
<u>COMPLIANCE DETERMINATION CRITERIA FOR ONE TO THREE (1-3) VISITS:</u>																				
Compliant = 0-5 core rule categories of Low risk, and / or No more than 2 core rule categories of Medium risk, or 1 Medium and 1 High risk																				
Not Compliant = 6 or more core rule categories of Low and/or 3 or more Medium risk, and / or 2 or more core rule categories of High risk																				
<u>COMPLIANCE DETERMINATION CRITERIA FOR FOUR OR MORE (4+) VISITS:</u>																				
Compliant = 0-7 core rule categories of Low risk, and / or No more than 3 core rule categories of Medium risk, or 2 Medium and 1 High																				
Not Compliant = 8 or more Low Risk, 4-7 or more core rule categories of Medium risk, and / or 2 or more core rule categories of High risk																				

Risk Assessment Matrix (RAM)

Risk Assessment (RA) Matrix Revised			
Levels	High	Medium	Low
Immediate	9	8	7
Short-term	6	5	4
Long-term	3	2	1
	<i>Probability</i>		
Regulatory Compliance (RC): # of Rules out of compliance and In compliance	8+ rules out of compliance. 92 or less regulatory compliance.	3-7 rules out of compliance. 93 – 97 regulatory compliance.	2 or fewer rules out of compliance. 98 – 99 regulatory compliance.

*Regulatory Compliance

(RC)(Prevalence/Probability/History + Risk/Severity Level)

Tier 1 = ((RC = 93 – 97) + (Low Risk)); ((98 – 99) + (Low Risk)) = Tier 1

Tier 2 = (RC = 92 or less) + (Low Risk) = Tier 2

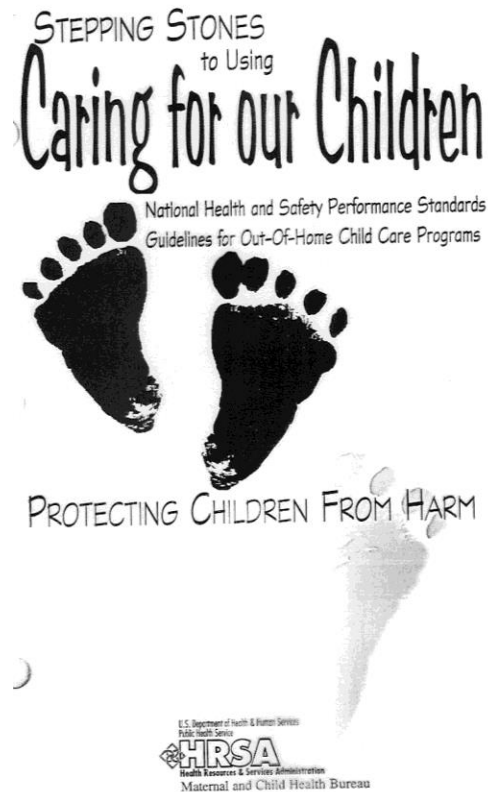
Tier 3 = ((RC = 93 – 97) + (Medium Risk)); ((98 – 99) + (Medium Risk)) = Tier 3

Tier 4 = (RC = (92 or less) + (Medium Risk)) = Tier 4; ((93 -97) +(High Risk)) = Tier 4; ((98 – 99) + (High Risk)); ((92 or less) + (High Risk)) = Tier 4+

Using RAM to make licensing decisions

RA Example = Stepping Stones

74



13 Key Indicators/Stepping Stones

Crosswalk with State Rules Template

75

13 Indicators/Stepping Stones Standard	State Licensing Rule	Analysis	Analysis Clarification	Recommendation	Next Steps

Key Indicators (KI)(Fiene & Nixon, 1985)

76

- **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 described on the previous slide.**
- **Must be 100% compliance with key indicator rules.**

Advantages of Key Indicators

77

- **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

78

- ❑ **Licensing rules must be well written, comprehensive, and measurable.**
- ❑ **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

79

- ❑ **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.**

Criteria for Using Key Indicators

80

- 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

81

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+

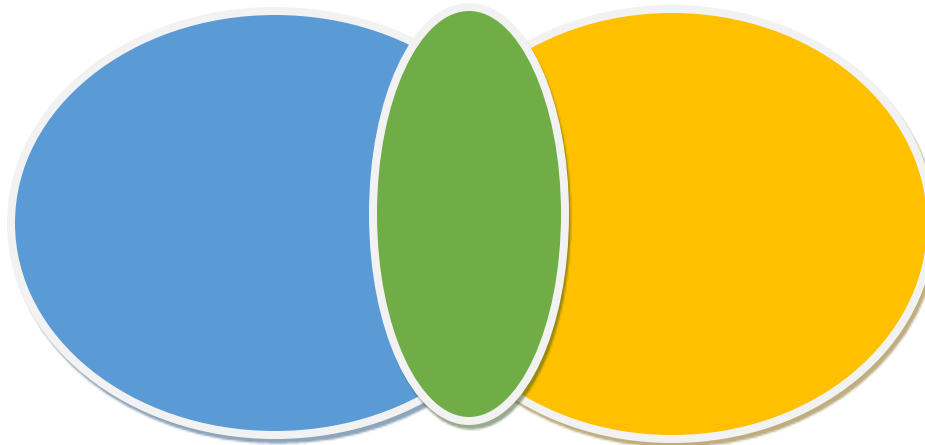
- Time and cost savings.
- All services.
- Benchmarks in all services.
- CC national benchmarks.
- Safeguards.
- Tied to outcomes study.
- National benchmarks.
- Inter-National benchmarks.
- Risk assessment/DMLMA.

Relationship of 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

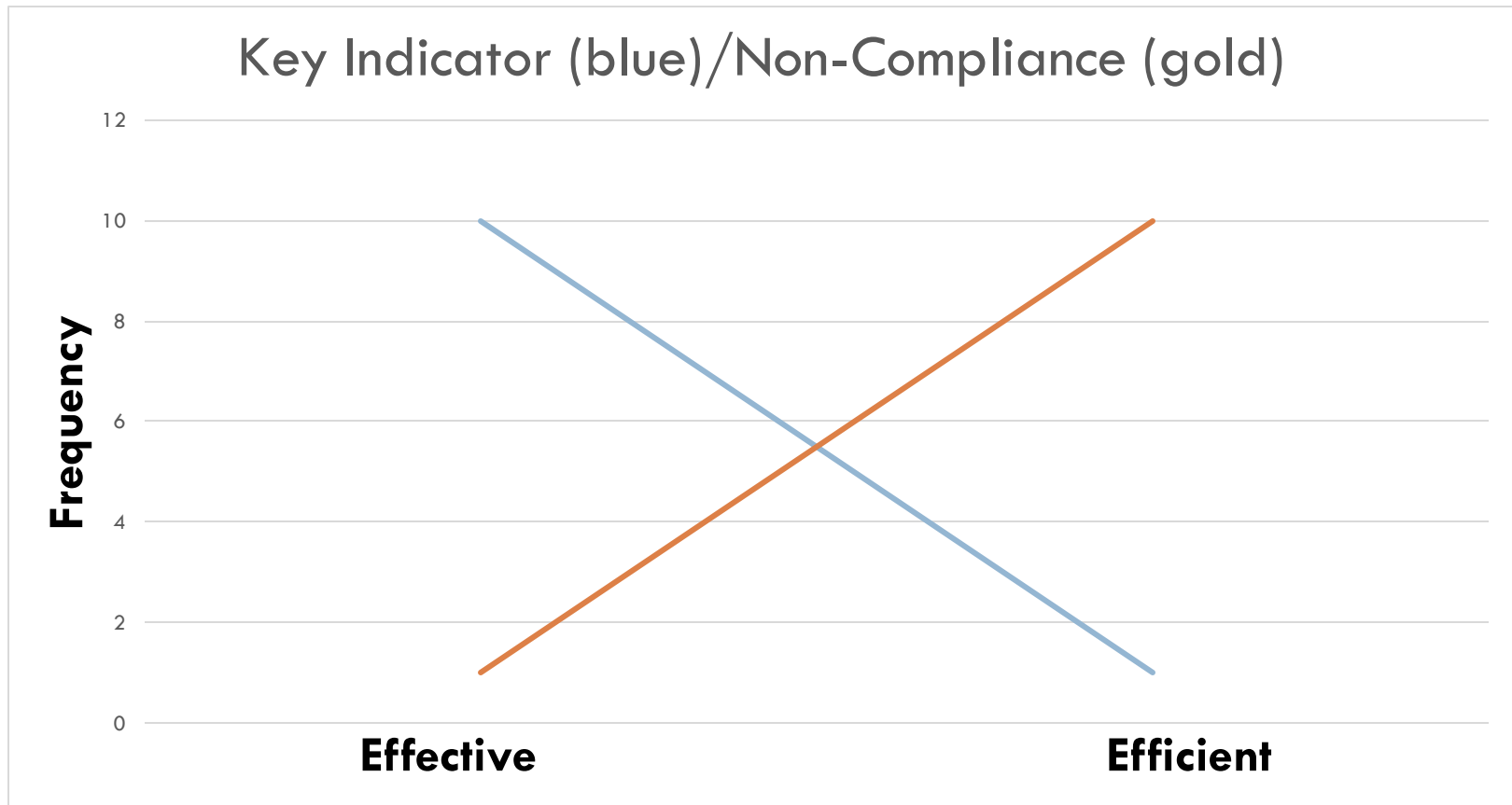
Point System = CR
1 Extreme Rule = CR
Relative scoring 1/9

Non-Compliance

1 Rule = CR

Key Indicator/Non-Compliance Relationship

83



Key Indicator Formula Matrix

84

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>	A	B	Y
<i>Low Group = bottom 25%</i>	C	D	Z
<i>Column Total</i>	W	X	Grand Total

Key Indicator Matrix Expectations

85

- **$A + D > B + C$**
- **$A + D = 100\%$** 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). This can be eliminated by using 100% compliance for the High Group.

Key Indicator Statistical Methodology

86

$$\phi = \frac{(A)(D) - (B)(C)}{\sqrt{(W)(X)(Y)(Z)}}$$

A = High Group + Programs in Compliance on Specific Compliance Measure.

B = High Group + Programs out of Compliance on Specific Compliance Measure.

C = Low Group + Programs in Compliance on Specific Compliance Measure.

D = Low Group + Programs out of Compliance on Specific Compliance Measure.

W = Total Number of Programs in Compliance on Specific Compliance Measure.

X = Total Number of Programs out of Compliance on Specific Compliance Measure.

Y = Total Number of Programs in High Group.

Z = Total Number of Programs in Low Group.

Theory of Regulatory Compliance Algorithm (Fiene KIS Algorithm)

87

- 1) $\Sigma R = C$
- 2) Review C history x 3 yrs
- 3) $NC + C = CI$
- 4) If $CI = 100 \rightarrow KI$
- 5) If $KI > 0 \rightarrow CI$ or if $C < 100 \rightarrow CI$
- 6) If $RA (NC\% > 0) \rightarrow CI$
- 7) $KI + RA = DM$
- 8) $KI = ((A)(D)) - ((B)(E)) / \text{sqrt}((W)(X)(Y)(Z))$
- 9) $RA = \Sigma R1 + \Sigma R2 + \Sigma R3 + \dots \Sigma Rn / N$
- 10) $(TRC = 99\%) + (\phi = 100\%)$
- 11) $(CI < 100) + (CIPQ = 100) \rightarrow KI (10\% CI) + RA (10-20\% CI) + KIQP (5-10\% \text{ of } CIPQ) \rightarrow OU$

Legend:

88

- **R = Rules/Regulations/Standards**
- **C = Compliance with Rules/Regulations/Standards**
- **NC = Non-Compliance with Rules/Regulations/Standards**
- **CI = Comprehensive Instrument for determining Compliance**
- **ϕ = Null**
- **KI = Key Indicators; $KI \geq .26$ Include; $KI \leq .25$ Null, do not include**
- **RA = Risk Assessment**
- **$\Sigma R1$ = Specific Rule on Likert Risk Assessment Scale (1-8; 1 = low risk, 8 = high risk)**
- **N = Number of Stakeholders**
- **DM = Differential Monitoring**
- **TRC = Theory of Regulatory Compliance**

Legend (cont)

89

- **CIPQ = Comprehensive Instrument Program Quality**
- **KIPQ = Key Indicators Program Quality**
- **OU = Outcomes**
- **A = High Group + Programs in Compliance on Specific Compliance Measure (R1...Rn).**
- **B = High Group + Programs out of Compliance on Specific Compliance Measure (R1...Rn).**
- **E = Low Group + Programs in Compliance on Specific Compliance Measure (R1...Rn).**
- **D = Low Group + Programs out of Compliance on Specific Compliance Measure (R1...Rn).**
- **W = Total Number of Programs in Compliance on Specific Compliance Measure (R1...Rn).**
- **X = Total Number of Programs out of Compliance on Specific Compliance Measure (R1...Rn).**
- **Y = Total Number of Programs in High Group ($\Sigma R = 98+$).**
- **Z = Total Number of Programs in Low Group ($\Sigma R \leq 97$).**
- **High Group = Top 25% of Programs in Compliance with all Compliance Measures (ΣR).**
- **Low Group = Bottom 25% of Programs in Compliance with all Compliance Measures (ΣR).**

Key Indicator Coefficient Ranges

90

<u>KI Coefficient Range</u>	<u>Characteristic of Indicator</u>	<u>Decision</u>
(+1.00) – (+.26)	Good Predictor - Licensing	Include
(+1.00) – (+.76)	<i>Good Predictor – QRIS</i>	<i>Include</i>
(+.25) – (-.25)	Unpredictable - Licensing	Do not Include
(+.75) – (-.25)	<i>Unpredictable - QRIS</i>	<i>Do not Include</i>
(-.26) – (-1.00)	Terrible Predictor	Do not Include

Examples of Key Indicator Applications

91

- **Health and Safety Licensing Key Indicators planned or implemented in the following states and provinces: Pennsylvania, Kansas, California, Illinois, Indiana, West Virginia, Michigan, Ontario, British Columbia, Saskatchewan, Montana, Oregon, Washington, New York, Maine, Texas.**
- **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)

92

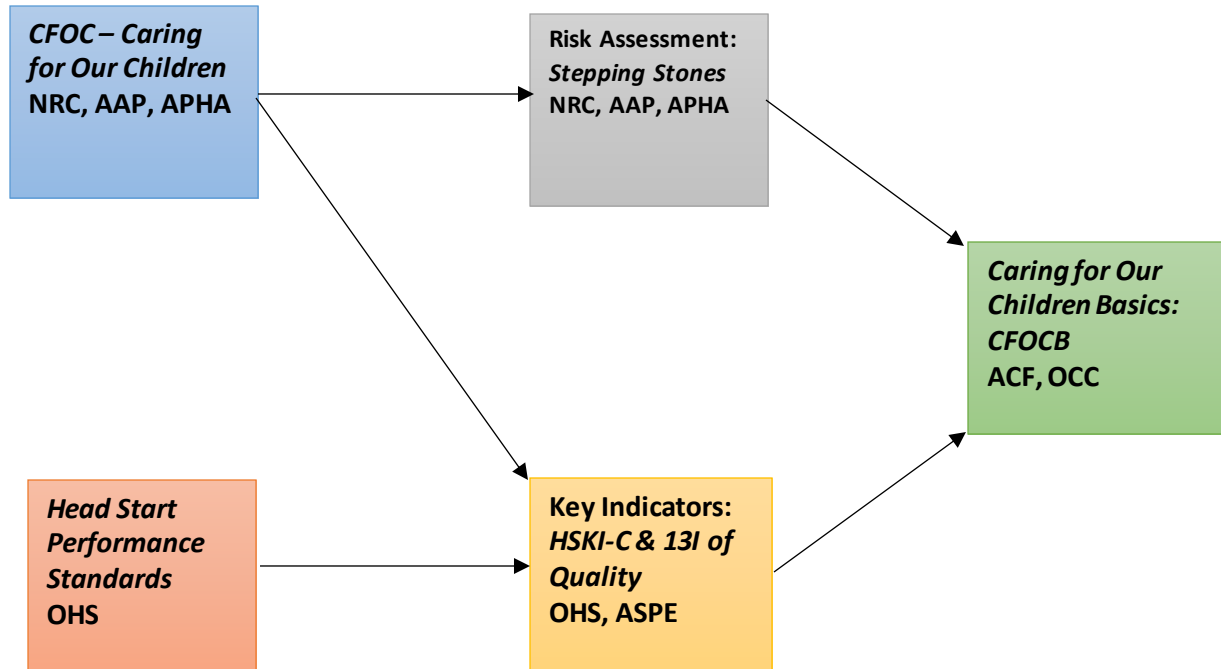
- ❑ **Program is hazard free in-door and out-doors.**
- ❑ **Adequate supervision of children is present.**
- ❑ **Qualified staff.**
- ❑ **CPR/First Aid training for staff.**
- ❑ **Hazardous materials are inaccessible to children.**
- ❑ **Staff orientation and training.**
- ❑ **Criminal Record Checks.**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

Caring for Our Children Basics (2015)

93

- **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)*



Federal Legislation

95

- In the House of Representatives, U. S., September 15, 2014. Resolved, That the bill from the Senate (S. 1086) entitled “An Act to reauthorize and improve the Child Care and Development Block Grant Act of 1990, and for other purposes.”, do pass with the following
- SECTION 1. SHORT TITLE. 1 This Act may be cited as the “Child Care and Development Block Grant Act of 2014”.

QRIS Key Indicators – CO. QualiStar

96

- ☐ **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.**

The Key Indicators from *Stepping Stones* (3rd Edition)

97

- **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

98

- **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.**

Head Start Key Indicators (Fiene, 2013c)

99

CM	Phi	ES	CO	IS	Total Violations
CDP4.1	.28***	.10*	ns	ns	.30***
CHS1.1	.39***	.15**	.16**	ns	.39***
CHS1.2	.33***	.18**	.15**	.10*	.36***
CHS2.1	.49***	.18**	.15**	ns	.54***
CHS3.10	.39***	.11*	.11*	ns	.24***
PRG2.1	.31***	.11*	ns	ns	.46***
SYS2.1	.47***	.15**	.16**	.14**	.55***
SYS3.4	.58***	.13*	.10*	ns	.36***

* $P < .05$

• ** $p < .01$

*** $p < .001$

Head Start Key Indicators Sample Content

100

CDE4.1	The program hires teachers who have the required qualifications, training, and experience.	1304.52(f), 645A(h)(1), 648A(a)(3)(B)(i), 648A(a)(3)(B)(ii), 648A(a)(3)(B)(iii)
CHS1.1	The program engages parents in obtaining from a health care professional a determination of whether each child is up to date on a schedule of primary and preventive health care (including dental) and assists parents in bringing their children up to date when necessary and keeping their children up to date as required.	1304.20(a)(1)(ii), 1304.20(a)(1)(iii)(A), 1304.20(a)(1)(iii)(B)
CHS1.2	The program ensures that each child with a known, observable, or suspected health, oral health, or developmental problem receives follow-up and further testing, examination, and treatment from a licensed or certified health care professional.	1304.20(a)(1)(iii), 1304.20(a)(1)(iv), 1304.20(c)(3)(ii)
CHS2.1	The program, in collaboration with each child's parent, performs or obtains the required linguistically and age-appropriate screenings to identify concerns regarding children within 45 calendar days of entry into the program, obtains guidance on how to use the screening results, and uses multiple sources of information to make appropriate referrals.	1304.20(a)(2), 1304.20(b)(1), 1304.20(b)(2), 1304.20(b)(3)
CHS3.10	Maintenance, repair, safety of facility and equipment	1304.53(a)(7)
PG2.1	Members of the governing body and the Policy Council receive appropriate training and technical assistance to ensure that members understand information they receive and can provide effective oversight of, make appropriate decisions for, and participate in programs of the Head Start agency.	642(d)(3)
SYS2.1	The program established and regularly implements a process of ongoing monitoring of its operations and services, including delegate agencies, in order to ensure compliance with Federal regulations, adherence to its own program procedures, and progress towards the goals developed through its Self-Assessment process.	1304.51(i)(2), 641A(g)(3)
SYS3.4	Prior to employing an individual, the program obtains a Federal, State, or Tribal criminal record check covering all jurisdictions where the program provides Head Start services to children; Federal, State, or Tribal criminal record check as required by the law of the jurisdiction where the program provides Head Start services; Criminal record check as otherwise required by Federal law	648A(g)(3)(A), 648A(g)(3)(B), 648A(g)(3)(C)

HSKI-C Monitoring Protocol

101

- **Administration for Children and Families**
- **U. S. Department of Health and Human Services**
- **Office of Head Start**
- **Head Start Key Indicator-Compliant (HSKI-C) Monitoring Protocol for 2015**
- **September 8, 2014**

Conceptual Similarities Between Licensing & QRIS and Key Indicator Methodology

102

- **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.**

Other Examples of Key Indicators

103

□ **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**

Key Indicator (KI) Formula Matrix for ECERS

Item 16 – Children Communicating

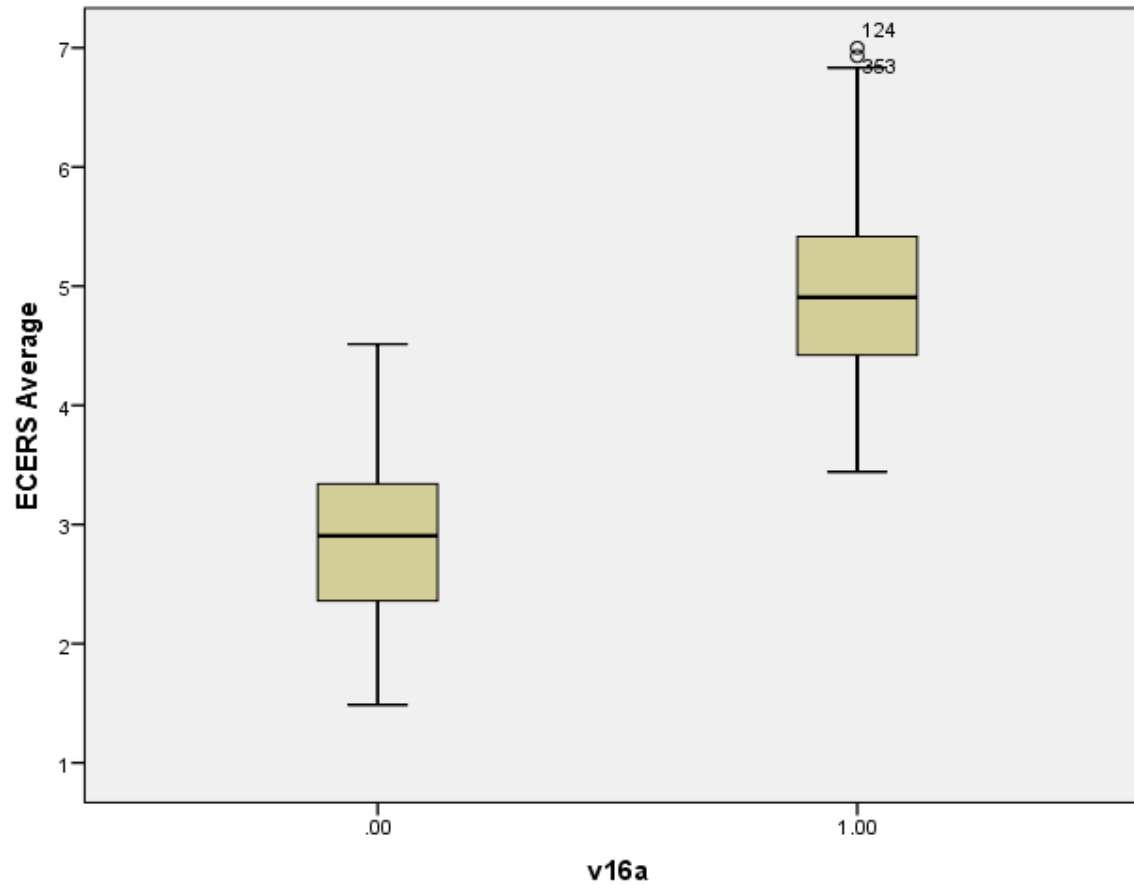
104

These data are taken from a 2002 Program Quality Study (Fiene, et al) completed in Pennsylvania. The phi coefficient was 1.00. The first time this has occurred in generating key indicators. It was replicated in a 2006 QRIS – Keystone STARS Evaluation.

	<i>Providers with a 5 or higher on Item 16</i>	<i>Programs with a 3 or less on Item 16</i>	<i>Row Total</i>
<i>High Group – 5.00+</i>	117	0	117
<i>Low Group – 3.00 or less</i>	0	35	35
<i>Column Total</i>	117	35	152

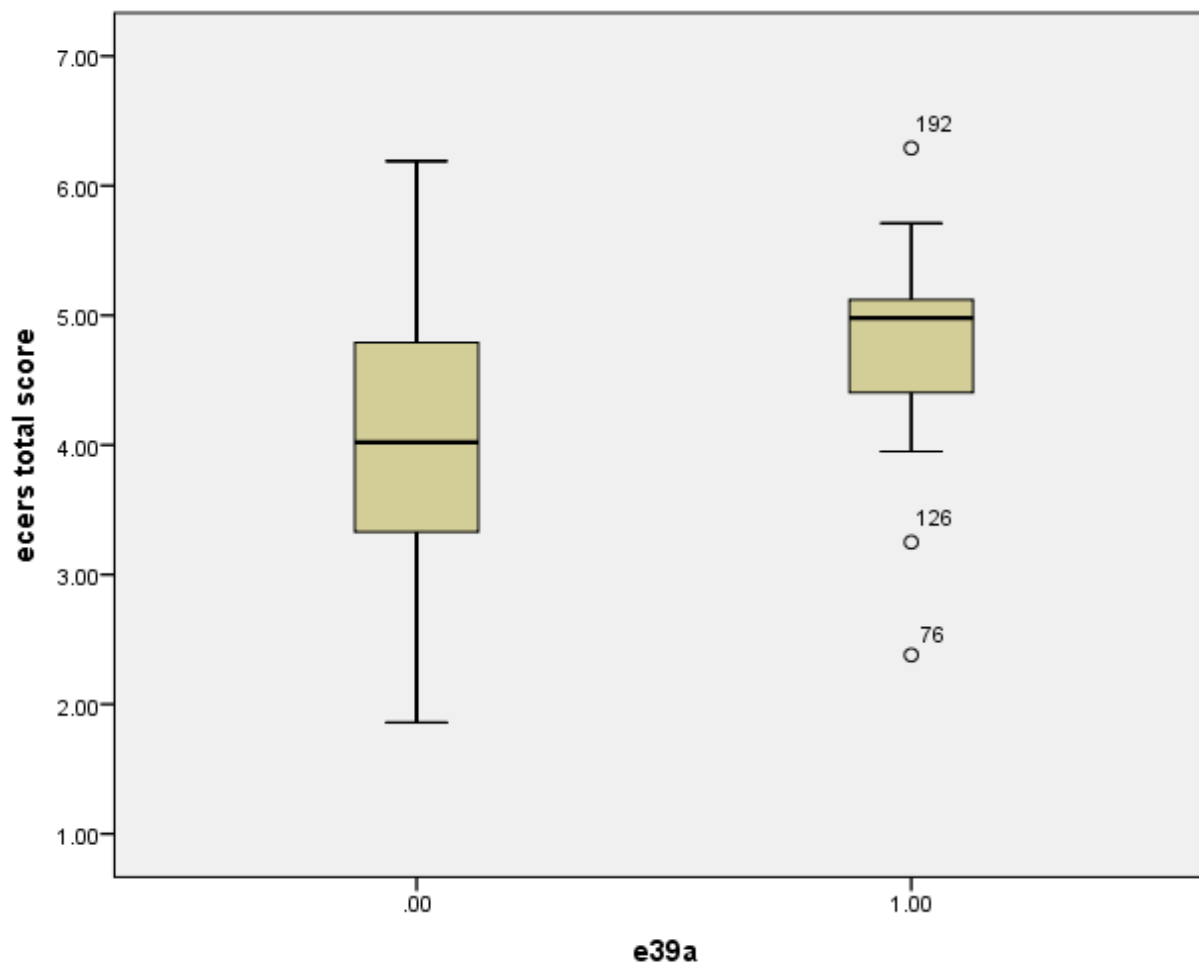
Box Plot of ECERS Item 16

105



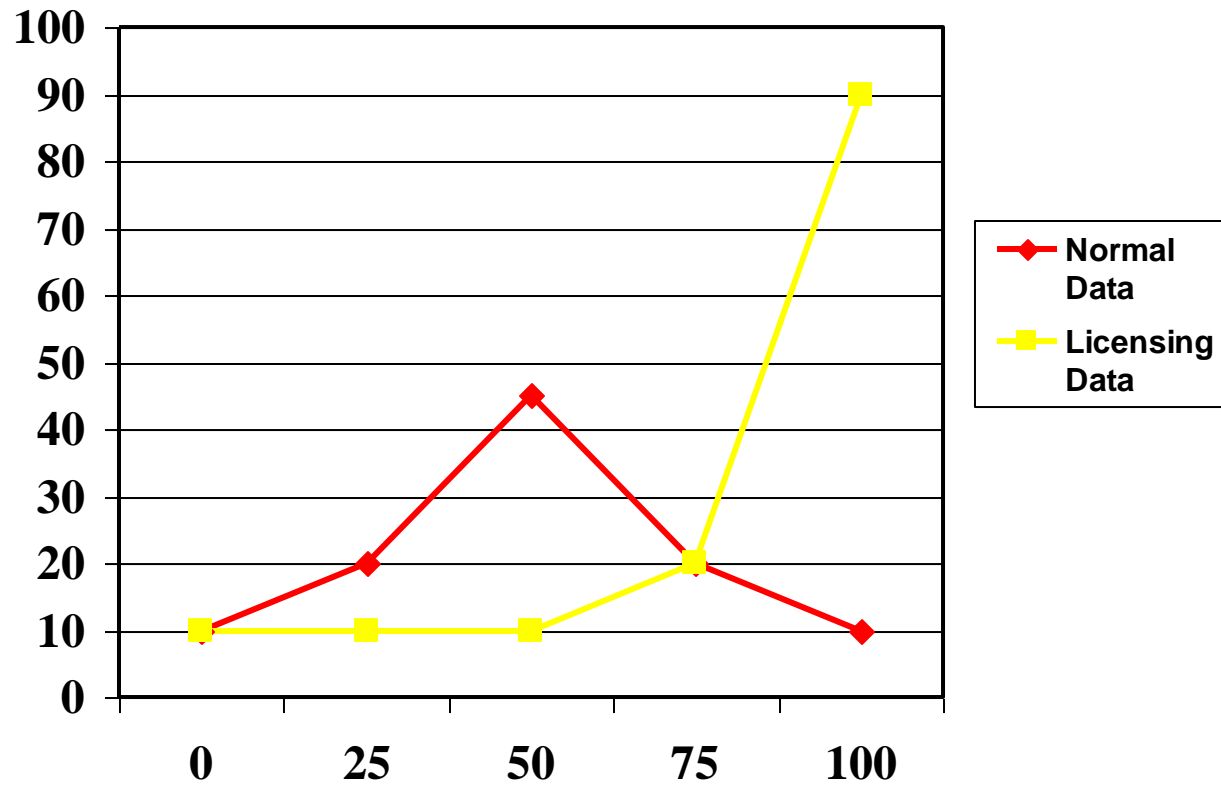
Box Plot of ECERS Item 39

106



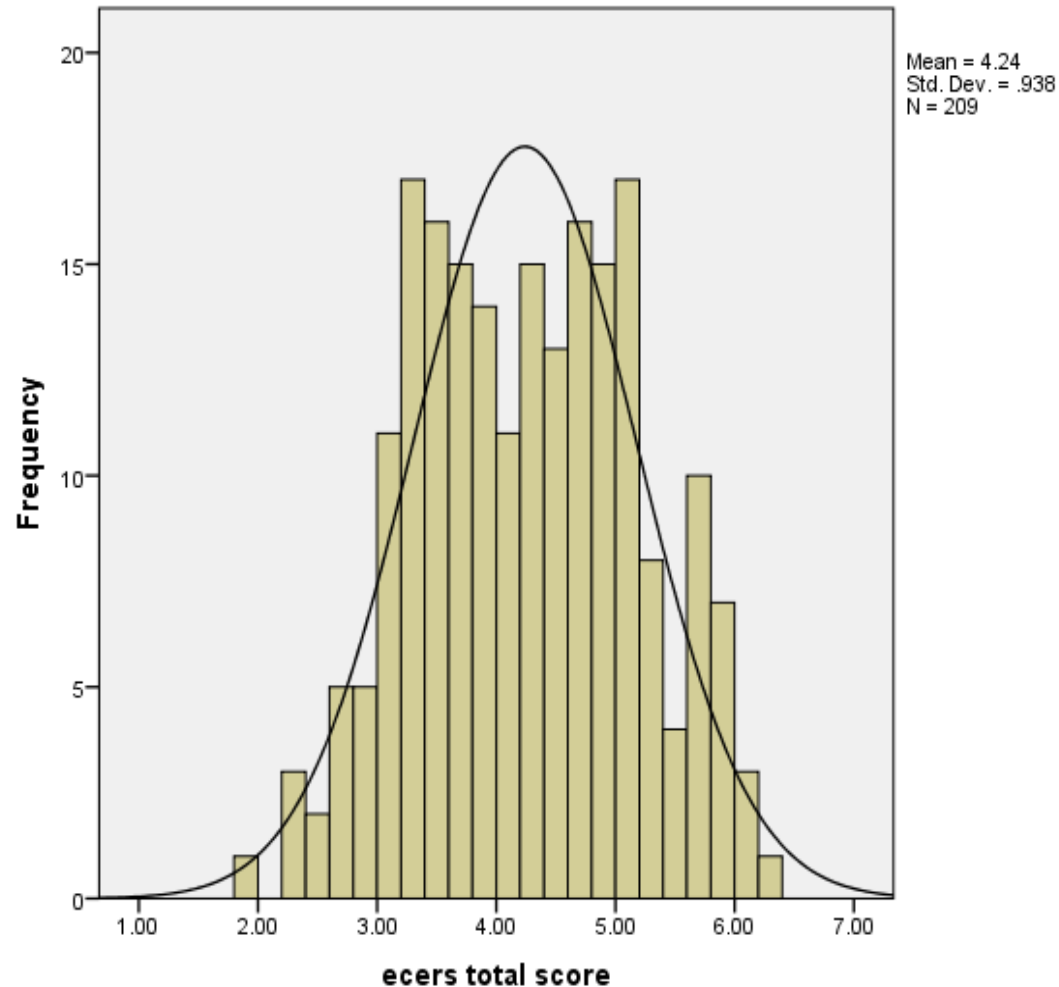
Normal & Skewed Data

107



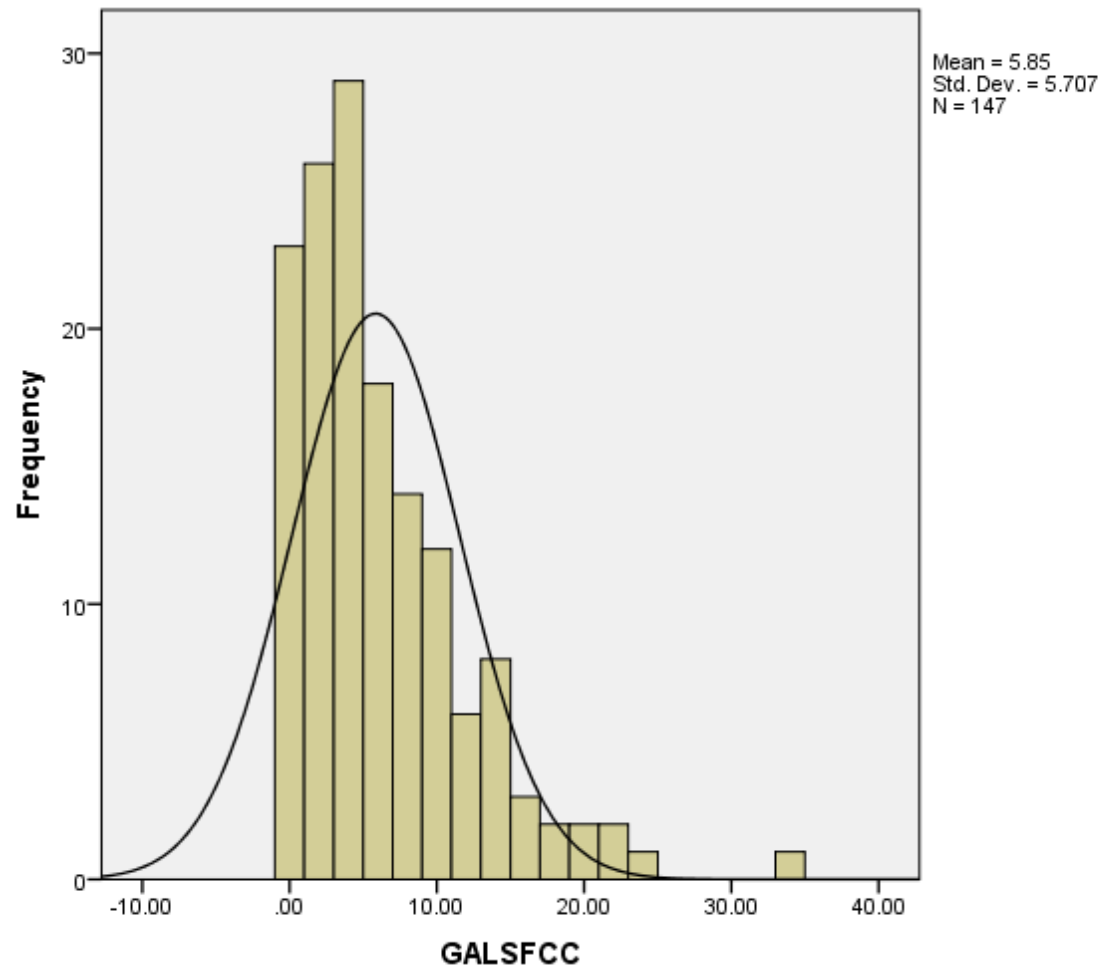
ECERS Total Scores

108



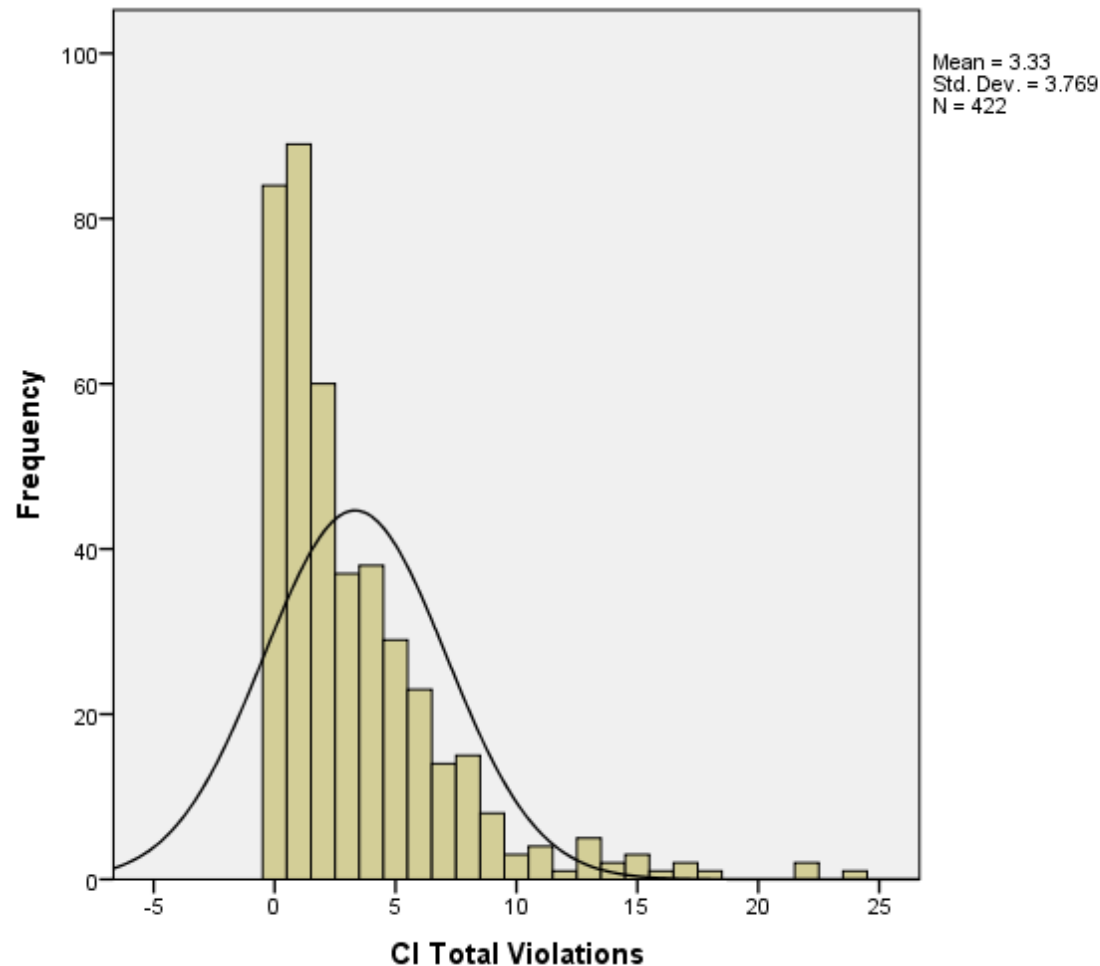
State's Family CC Home Licensing

109



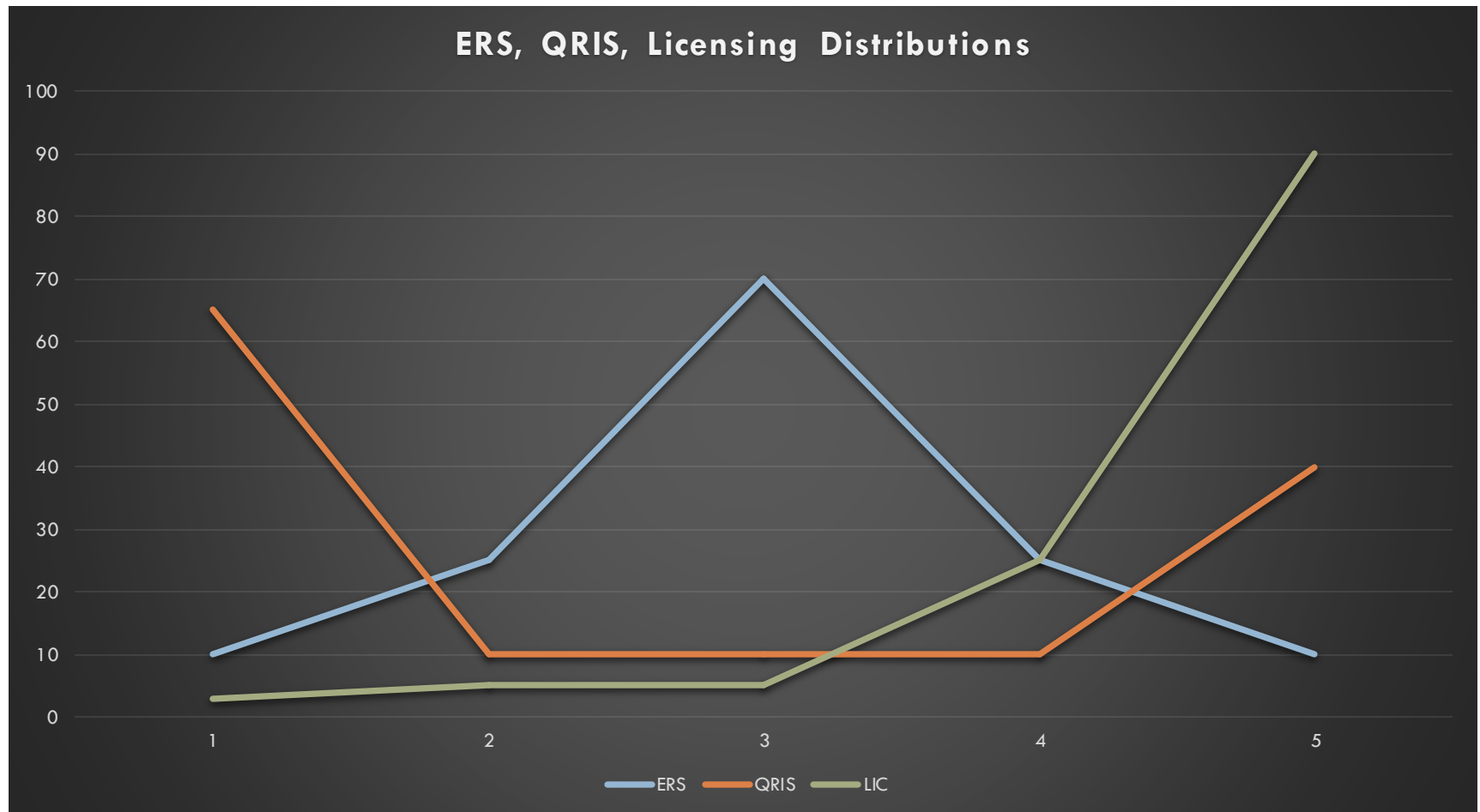
Head Start Performance Standards

110



ERS, QRIS, Licensing Comparisons

111



Dichotomization & Skewed Data

112

- When data are extremely skewed as is the case with licensing data, dichotomization of data is warranted.
- Skewed licensing data has a strong possibility of introducing very mediocre programs into the high group which will make it difficult to always identify the best programs.
- It is much easier to identify problem programs in a skewed data distribution.

Differential Monitoring Options

113

- •**Reward good compliance:**
 - –Abbreviated inspection – if no serious violations, for a period of time
 - –Fewer full compliance reviews if compliance record is strong
- •**Response to non-compliance:**
 - –Additional monitoring visits
 - –Technical assistance
- •**The number of core rule categories cited and the assigned risk level determines the annual compliance level. (Georgia)**
- •**Determine how often particular rules are included in inspections. Rules that pose the most risk of harm to children if violated are reviewed during all inspections. (Virginia)**

National Center on Child Care Quality Improvement, Office of Child Care

Provider Outcomes to Determine Differential Monitoring (DM)

114

- ❑ **Fully licensed – substantial/full compliance.**
- ❑ **Potentially accredited (NAEYC/NECPA).**
- ❑ **Highest star rating.**
- ❑ **Cost effective and efficient delivery system.**
- ❑ **Little turnover of staff and director.**
- ❑ **Fully enrolled.**
- ❑ **Fund surplus.**
- ❑ ***The above results determine the number of times to visit & what to review and resources allocated.***

Differential Monitoring (DM)

Allocation: An Example

115

- **Absolute System – One size fits all.**
 - ▣ 25% of providers need additional assistance & resources.
 - ▣ Other 75% receive the same level of monitoring services without differential monitoring based upon past compliance history. No additional services available.
- **Relative System – Differential Monitoring.**
 - ▣ 25% of providers need additional assistance & resources.
 - ▣ 25% have a history of high compliance and are eligible for Key Indicator/Abbreviated Monitoring visit. Time saved here is reallocated to the 25% who need the additional assistance & resources.
 - ▣ 50% receive the same level of monitoring services because they are not eligible for Key Indicators nor are they considered problem providers.

Monitoring Tools

116

- • **26 States use differential monitoring**
- – Increased from 11 States in 2005
- • **Most States report using abbreviated compliance forms**
- • **Nearly all States provide technical assistance during monitoring activities**
- – 45 percent report assisting facilities to improve quality beyond licensing regulations

National Center on Child Care Quality Improvement, Office of Child Care

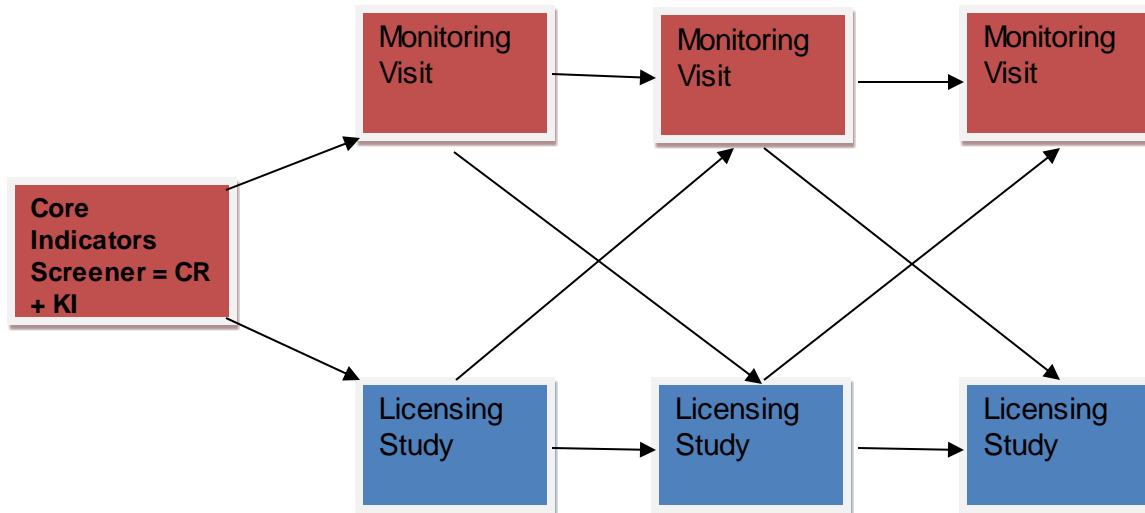
Program Monitoring Questions?

117

- Generalist versus Specialists Assessors.
- General (SS3) versus Special Standards (Licensing, QRIS, HSPS).
- How Key Indicators can be used?
 - ▣ KI = Generalists.
 - ▣ CI = Specialists.
- Based upon approach from previous slide, discussion should be generalist + specialist rather than generalist or specialist.

Differential Monitoring (DM) Example (Fiene, 2013e)

118



Compliance Decisions:

Core Indicators = Core Rules + Key Indicators – this becomes a screening tool to determine if a program receives a LS or MV visit.

Core Indicators (100%) = the next visit is a Monitoring Visit.. Every 3-4 years a full Licensing Study is conducted.

Core Indicators (not 100%) = The next visit is a Licensing Study where all rules are reviewed.

Compliance = 96%+ with all rules which indicates substantial to full compliance with all rules and 100% with Core Indicators. The next visit is a Monitoring Visit.

Non-compliance = less than 96% with all rules which indicates lower compliance with all rules. The next visit is a Licensing Study..

Math Model for Computing ACR (Fiene, 1979)

119

□ **$CH = (NC (TH+TO)) / 2) / (1/TA)$**

□ **Where:**

▣ **CH = Contact Hours**

▣ **NC = total number of children on the maximum enrollment day.**

▣ **TO = total number of hours the center is open.**

▣ **TH = total number of hours at full enrollment.**

▣ **TA = total number of teaching staff.**

Professional Development (PD)

(Fiene, 1995, Fiene, etal, 1998)

120

- ❑ **All staff have CDA or degrees in ECE.**
- ❑ **Director has BA in ECE.**
- ❑ **All staff take 24 hours of in-service training/yr.**
- ❑ **Mentoring of staff occurs.**
- ❑ **Training/PD fund for all staff.**
- ❑ **Professional development/training/technical assistance (PD) linked to Differential Monitoring (DM) results.**

Mentoring

Individualized, on-site support to help child care staff implement the knowledge and skills they are receiving in classroom instruction.

Benefits:

- ☐ **Building relationships.**
- ☐ **Effecting long term change in best practices.**
- ☐ **Providing a support system.**



Relationship between Child Care Income and Quality Measures (Fiene, 2002b)

122

Correlations

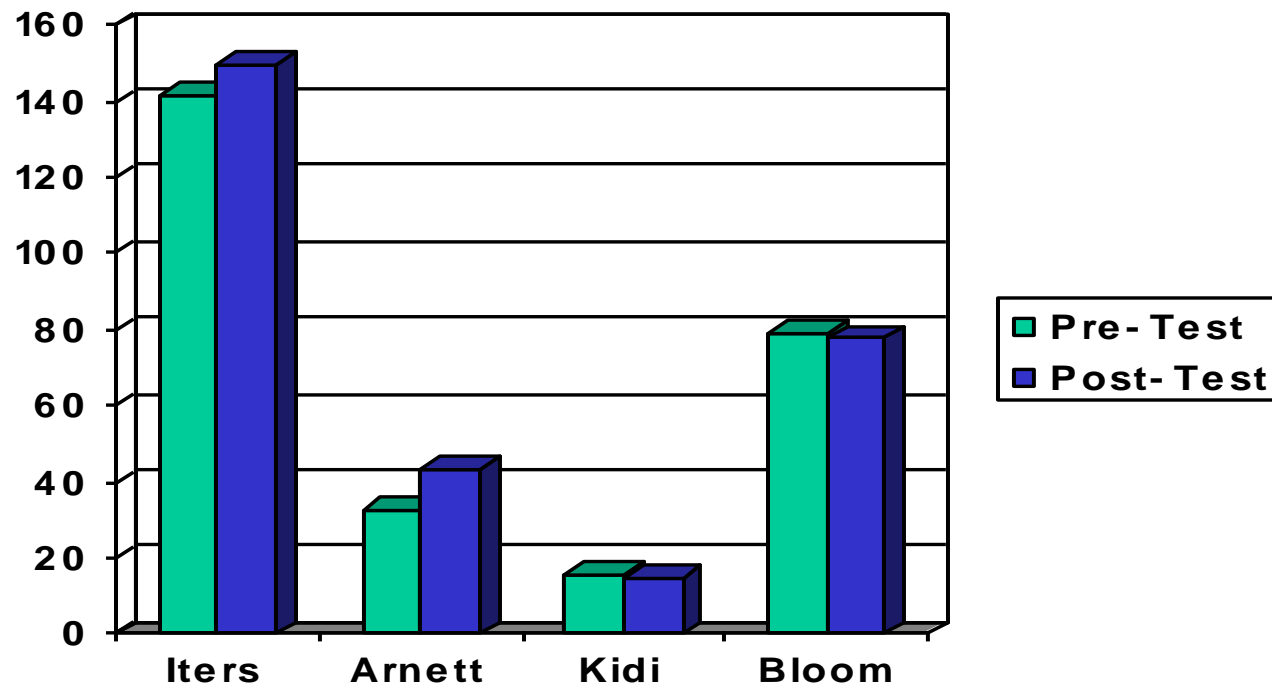
		ITERS	ARNETT	KIDI	BLOOM	DIR16
ITERS	Pearson Correlation	1.000	.599**	.107	.368*	.661**
	Sig. (2-tailed)	.	.000	.568	.038	.000
	N	49	45	31	32	37
ARNETT	Pearson Correlation	.599**	1.000	.108	.507**	.483**
	Sig. (2-tailed)	.000	.	.578	.004	.004
	N	45	46	29	30	34
KIDI	Pearson Correlation	.107	.108	1.000	-.035	.311
	Sig. (2-tailed)	.568	.578	.	.851	.130
	N	31	29	32	32	25
BLOOM	Pearson Correlation	.368*	.507**	-.035	1.000	.451*
	Sig. (2-tailed)	.038	.004	.851	.	.021
	N	32	30	32	33	26
DIR16	Pearson Correlation	.661**	.483**	.311	.451*	1.000
	Sig. (2-tailed)	.000	.004	.130	.021	.
	N	37	34	25	26	39

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

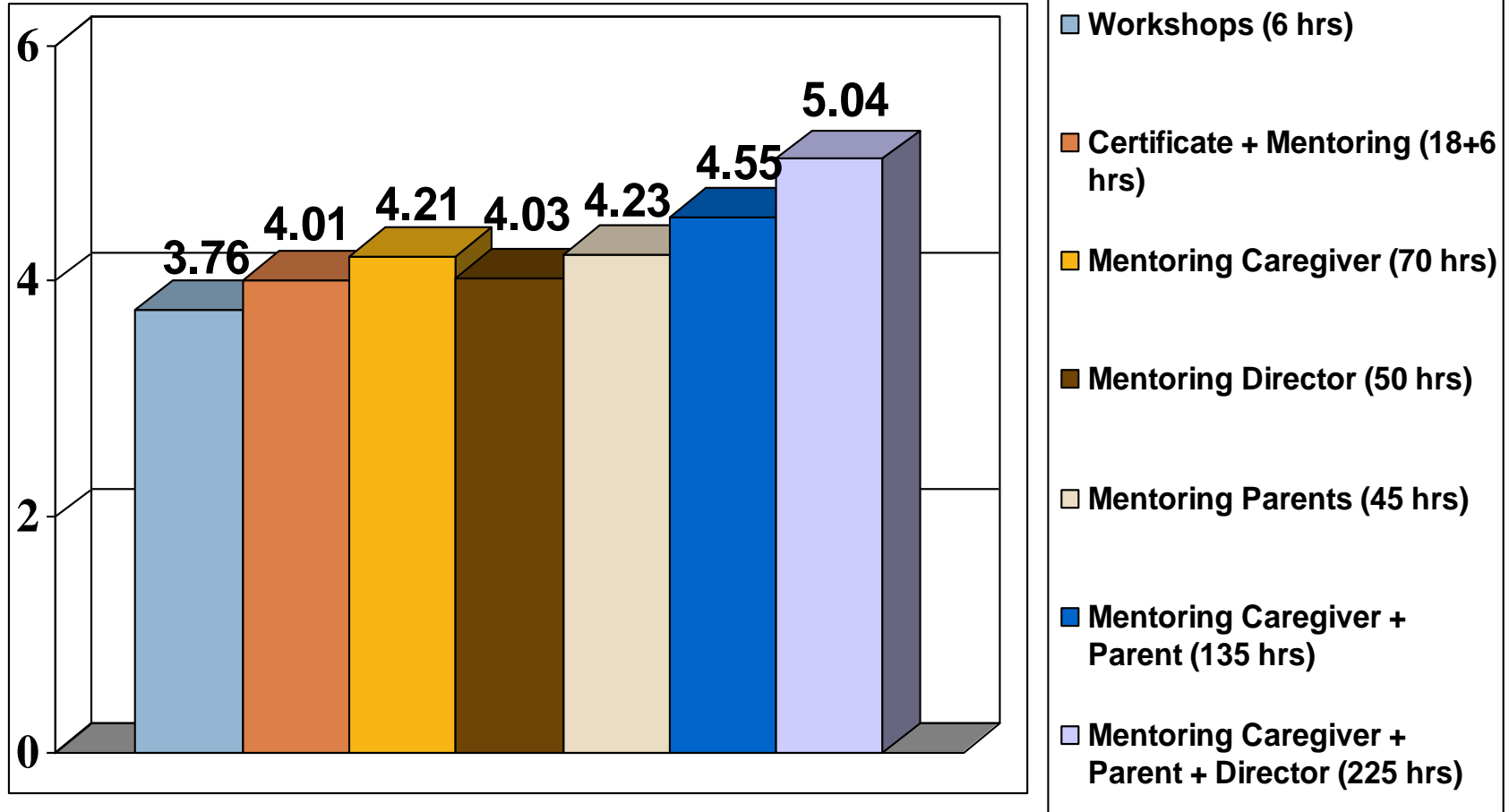
Infant-Toddler Teacher Mentoring

123



ITERS/HOME Post-Test Scores

124



Child Outcomes (CO)

125

- **Health and safety:**
 - ▣ **Immunizations (95%+).**
 - ▣ **Child well-being (90% of key indicators).**
- **Developmental Outcomes:**
 - ▣ **Social (90% meeting developmental benchmarks).**
 - ▣ **Emotional (90% meeting developmental benchmarks).**
 - ▣ **Cognitive (90% meeting developmental benchmarks).**
 - ▣ **Gross and fine motor (90% meeting developmental benchmarks).**

Correlation of Accreditation, Licensing, & Training with Child Outcomes

126

	Quality ECERS	Training EWECs/CCECD	Accreditation NECPA/NAEYC	Licensing SS
Slosson	.23*	.33*/.34*	.29*/.30*	.19
CBI-INT	.25*	.15/.14	.41*/.21*	.08
TELD	.09	.28*/.22*	.31*/.35*	.22*
ALI	.44*	.01/.11	.13/.04	.06
PBQ	.37*	.32*/.23*	.44*/.40*	.29*
CBI-SOC	.26*	.21*/.20*	.19/.23*	.18

- p < .05
- Kontos & Fiene (1987).

Key Element ECPQIM/DMLMA Publication Summary

127

- **PC = *Caring for Our Children* (AAP/APHA/NRC, 2012).**
- **PQ = *National Early Childhood Program Accreditation (NECPA)* (Fiene, 1996).**
- **RA = *Stepping Stones* (NRC, 2013).**
- **KI = *13 Indicators of Quality Child Care* (Fiene, 2002a).**
- **DM = *International Child Care & Education Policy* (Fiene, 2013a).**
- **PD = *Infant Caregiver Mentoring* (Fiene, 2002b).**
- **CO = *Quality in Child Care: The Pennsylvania Study* (Kontos & Fiene, 1997).**

Outstanding Issues

128

- ❑ **Process versus Structural Quality Indicators**
- ❑ **Input/Processes versus Output/Outcomes**
- ❑ **Impact of Pre-K and QRIS on Licensing**
- ❑ **Inter-rater reliability still is a big issue contributing to inconsistent data collection.**

Methodological Issues & Findings

129

- The need for states to routinely conduct reliability testing is vitally important to make sure that their licensing staff/inspectors are consistently measuring rules.
- The balancing between program compliance and program quality.
- Determining the most effective and efficient threshold is critical because as one becomes more efficient a loss of effectiveness does occur which can lead to an increase in false positives and negatives.
- Dichotomization of data is warranted with regulatory compliance and is recommended as a statistical technique.
- The Fiene Coefficient has to be increased from .25 to .40 with a p value of .0001 in order to deal with the increasing use of population data from state systems.
- 100% compliance needs to be employed in determining the upper end (High Compliance Group) of the 25/50/25 data distribution.
- False negatives will nullify the use of a rule as a key indicator.

Lessons Learned

130

- 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

131

- 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. Studies have been completed in Washington state and the Province of Saskatchewan.
- 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. Pilot testing has occurred in both the states of Indiana & Washington and the same is still true.
- 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.

Concluding Thoughts

132

- *The relationship between regulatory compliance and quality is not linear.*
- *Regulatory compliance has difficulty in distinguishing the best programs from the mediocre programs.*
- *Regulatory compliance is very effective at identifying the worse programs.*
- *There still is the need to balance regulatory compliance with quality indicators.*
- *There is the need to validate differential monitoring approaches, such as risk assessment and key indicators.*
- *What is the ideal threshold for the number of key indicator/predictor rules so that we can maintain a balance of program monitoring effectiveness and efficiency.*
- *Risk assessment rules are usually in compliance because they place children at such risk of mortality or morbidity.*
- *More recent risk assessment systems have two components: severity and probability of occurrence.*
- *Key indicator/predictor rules are not usually in compliance but are not out of compliance a great deal.*
- *What is it about key indicator/predictor rules that make them so effective in discriminating between high and low performing programs.*
- *Licensing data are very skewed and because of this there is the need to dichotomize the data.*
- *There is very little variance in licensing data with generally only 20 rules separating the top compliant programs from the lowest compliant programs.*

Core Indicators

133

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

Fiene Scale of RC+PQ Key Indicators

134

ECERCPQ Score Sheet and Scale (Fiene@2020)

Total ECERCPQ Score = (1 + 2) + (3) + (4 + 5 + 6) + (7 + 8 + 9 + 10) + (11) - (12) - (13)

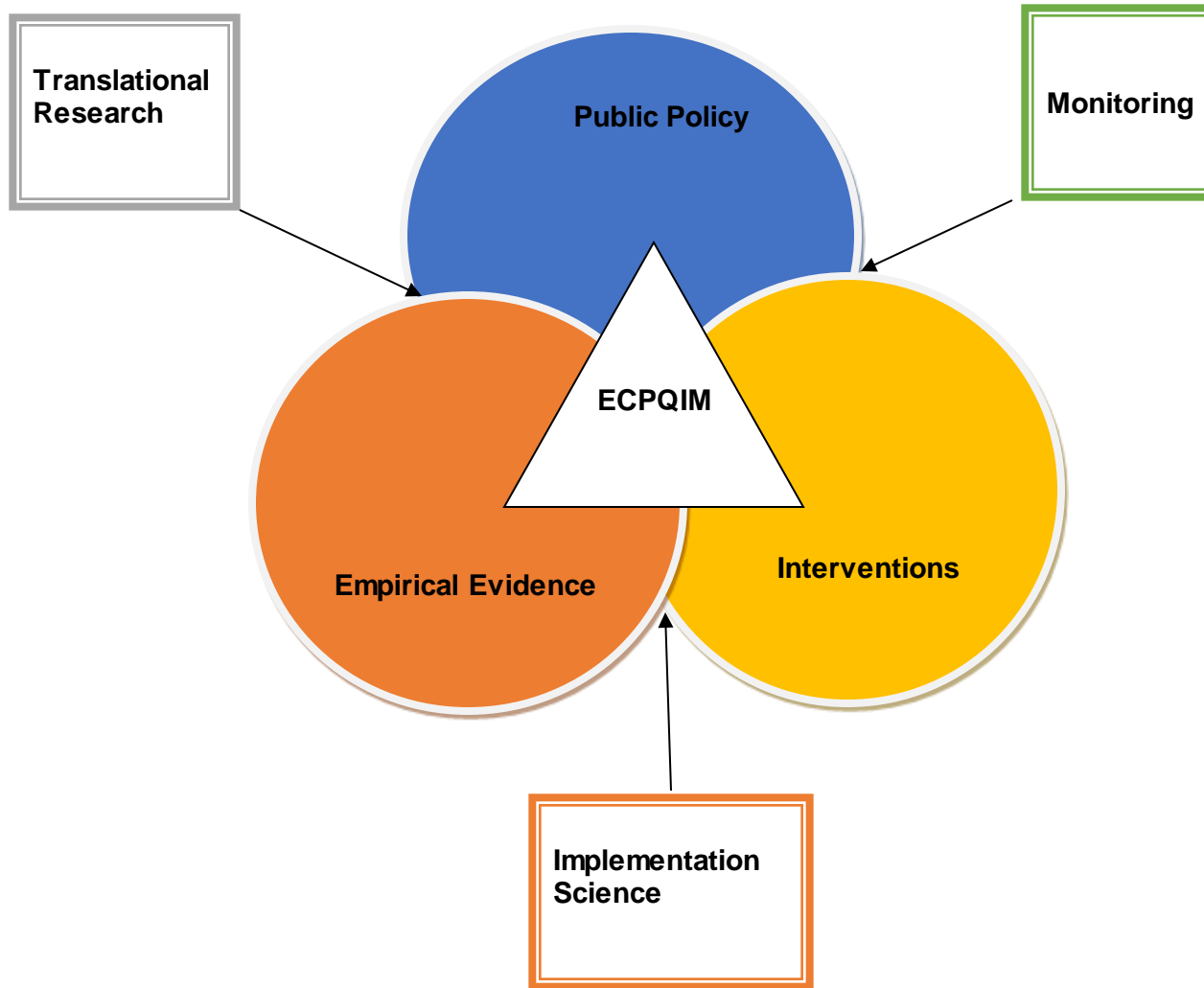
ECERCPQ = $\Sigma ((\tilde{A} + \tilde{A}) + (\%) + (\tilde{n} + \tilde{n} + \tilde{n}) + (\tilde{n} + \tilde{n} + \tilde{n} + \tilde{n}) + (\%)) - \Sigma ((\tilde{n}) - (\tilde{n}))$

Standards	Scoring	Scale	Score
1	Average Number of Teachers	A	
2	Average Number of Teachers	A	
3	Percent	B	%
4	Types of Activities	D	
5	Types of Opportunities	D	
6	Types of Activities	D	
7	Number of Positive Observations	©	
8	Number of Positive Observations	©	
9	Number of Positive Observations	©	
10	Number of Positive Observations	©	
11	Percent	E	%
12	Violations	E	
13	Number	E	

Legend for Fiene Scale

135

- 1) The number of ECE AA and BA teachers? (A)
- 2) The number of ECE in-service ECE coaching or reflective supervision opportunities engaged in by ECE teachers? (A)
- 3) There is a developmentally appropriate curriculum that is individually based upon the developmental assessments of each child in the respective ECE classroom. (B)
- 4) The program provides opportunities for staff and families to get to know one another. (D)
- 5) Families receive information on their child's progress on a regular basis, using a formal mechanism such as a report or parent conference. (D)
- 6) Families are included in planning and decision making for the program. (D)
- 7) Teachers encourage children to communicate. (C)
- 8) Teachers use language to develop reasoning skills. (C)
- 9) Teachers listen attentively when children speak. (C)
- 10) Teachers speak warmly to children. (C)
- 11 - 13) Children's immunizations are up to date, the program is a hazard free environment, and there is proper supervision at all times. (E)



Early Childhood Program Quality Indicator Model (ECPQIM) Evolution

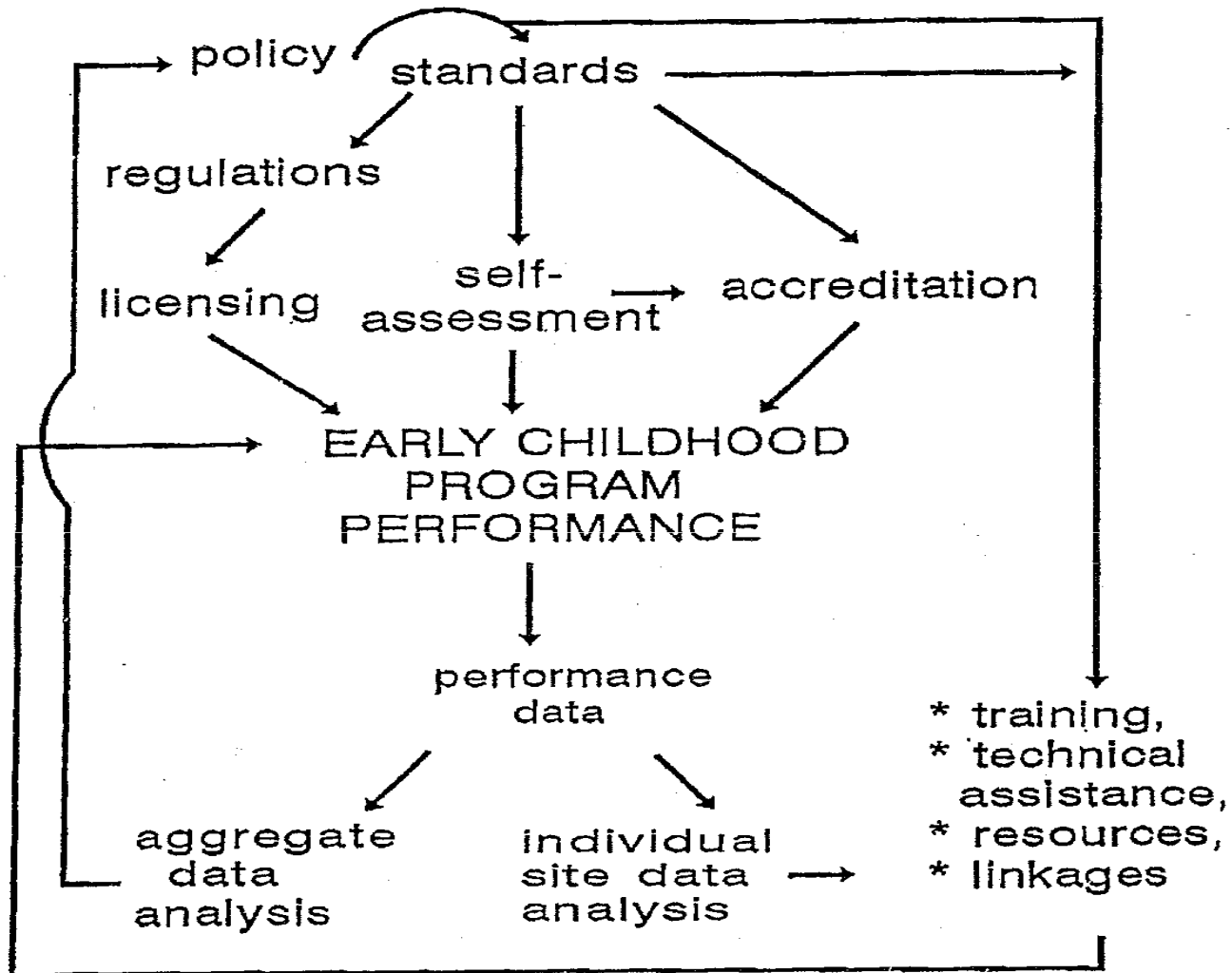
137

- ❑ **Nixon Veto of Comprehensive Child Development Bill 1971. (ECPQIM0)**
- ❑ **FIDCR Moratorium 1981. (ECPQIM1)**
- ❑ **Reagan Block Grant Formula 1983. (ECPQIM1)**
- ❑ **CCDBG enacted 1991. (ECPQIM2)**
- ❑ **Caring for Our Children (CFOC) 1st Edition 1993. (ECPQIM2)**
- ❑ **Stepping Stones 1st Edition 1995. (ECPQIM2)**
- ❑ **Child Care Development Fund (CCDF) enacted 2001. (ECPQIM3)**
- ❑ **Child Care Aware First Report Card 2007. (ECPQIM3)**
- ❑ **OPRE/ACF Validation Brief 2012. (ECPQIM4)**
- ❑ **Differential Monitoring Logic Model (DMLMA) 2012-13. (ECPQIM4)**
- ❑ **CCDBG Bill, CCDF Rule, CFOC-Basics, OCC/ASPE Papers 2013-15 (ECPQIM4+), Regulatory Compliance Scale, Fiene Scale.**

ECPQIM 1- 5 Graphics

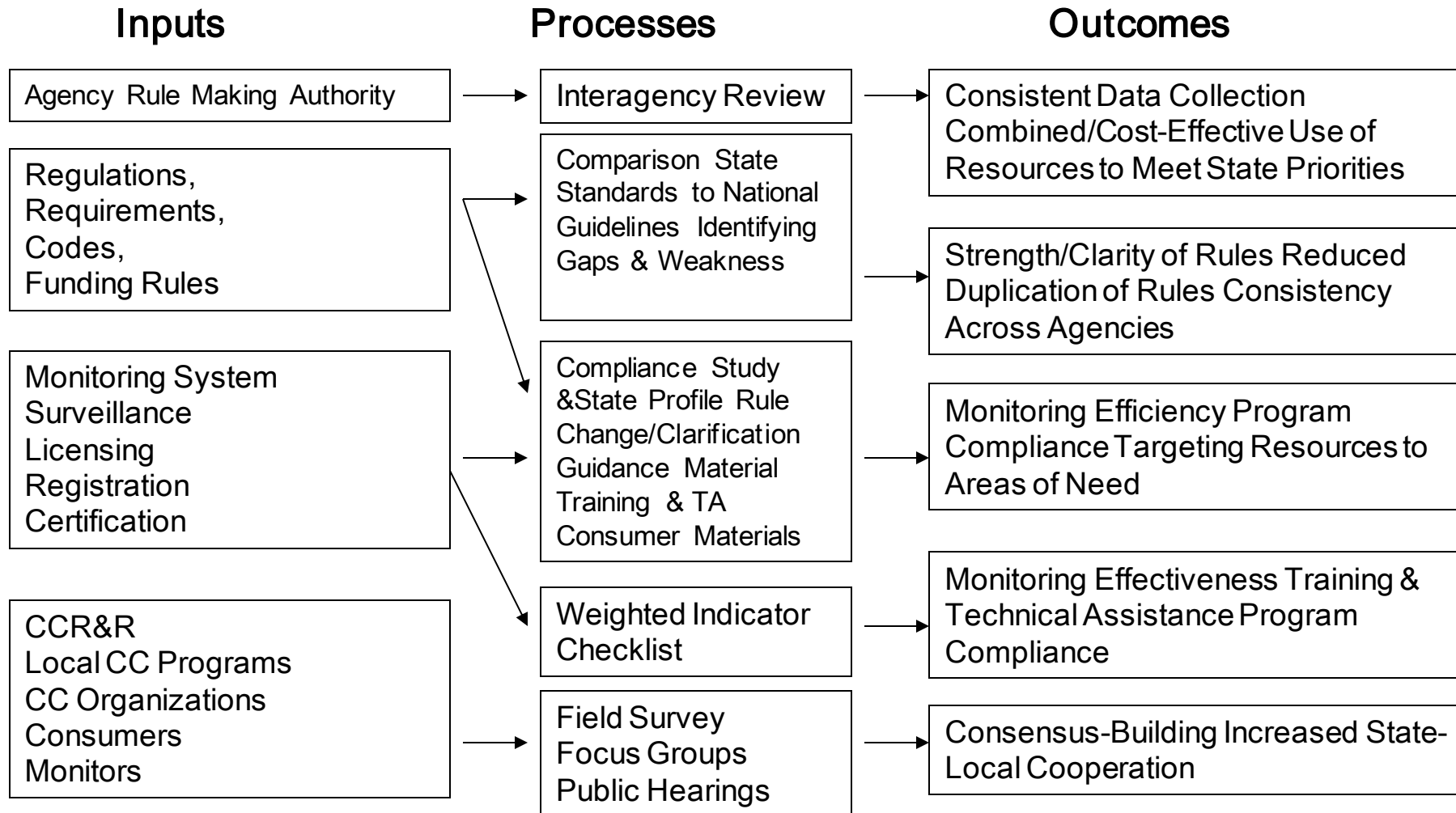
The following graphics represent the previous generations of ECPQIM 1-5 beginning in 1975 up to the present model (ECPQIM5, 2022).

EARLY CHILDHOOD PROGRAM QUALITY IMPROVEMENT



ZERO TO THREE's Better Care for the Babies Project: A System's Approach to State Child Care Planning—Griffin/Fiene (1995), (ECPQIM 2), 1995 - 1999

140



Early Childhood Program Quality Indicator Model 3--Fiene & Kroh, (2000)

141

$$\mathbf{CO + PO = (PD + PC + PQ)/PM}$$

Where:

CO = Child Outcomes

PO = Provider Outcomes

PD = Professional Development

PC = Program Compliance/Licensing

PQ = Program Quality/QRIS

PM = Program Monitoring

DIFFERENTIAL MONITORING LOGIC MODEL & ALGORITHM (DMLMA©) (Fiene, 2012): A 4th Generation ECPQIM – Early Childhood Program Quality Indicator Model

$$CI \times PQ \Rightarrow RA + KI \Rightarrow DM + PD \Rightarrow CO$$

Definitions of Key Elements:

CI = Comprehensive Licensing Tool (Health and Safety)(*Caring for Our Children*)

PQ = *ECERS-R, FDCRS-R, CLASS, CDPEs* (Caregiver/Child Interactions/Classroom Environment)

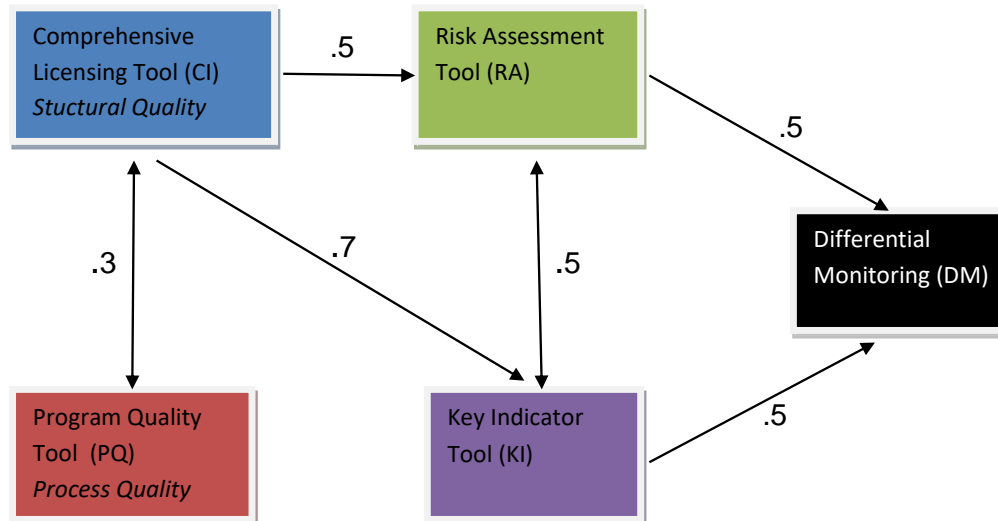
RA = Risk Assessment, (High Risk Rules)(*Stepping Stones*)

KI = Key Indicators (Predictor Rules)(*13 Key Indicators of Quality Child Care*)

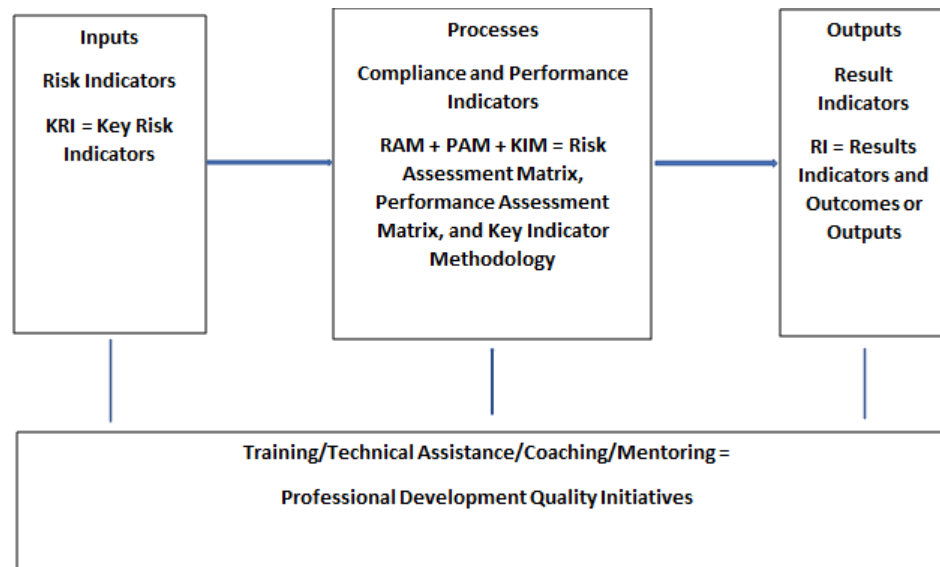
DM = Differential Monitoring, (How often to visit and what to review)

PD = Professional Development/Technical Assistance/Training

CO = Child Outcomes (See Next Slide for PD and CO Key Elements)



ECPQIM5: Early Childhood Program Quality Improvement/Indicator Model Version 5



Early Childhood Program Quality Improvement and Indicator Models (ECPQI2M0–5©)

144

ECPQI2M0© 1972 – 1974. Regional Model; EMIS (Fiene, 1975).

ECPQI2M1©: 1975 – 1994. Qualitative to Quantitative; focus on reliability; data utilization; distinctions between program monitoring and evaluation; Key Indicators, Weighted Rules, & principles of licensing instrument design introduced. (Fiene, 1981; Fiene & Nixon, 1985).

ECPQI2M2©: 1995 – 1999. Policy Evaluation and Regulatory Systems Planning added to model. (Griffin & Fiene, 1995).

ECPQI2M3©: 2000 – 2011. Inferential Inspections & Risk Assessment added to model. (Fiene & Kroh, 2000).

ECPQI2M4/4+©: 2012 – 2021. Validation with expected Thresholds & Differential Monitoring added; Quality Indicators introduced. (Fiene, 2012, 2013b, 2015).

ECPQI2M5: 2022 – present. Full integration of compliance and performance indicators (Fiene, 2022).

Theory of Regulatory Compliance and Early Childhood Outcomes Algorithms

145

- **Theory of Early Childhood Outcomes**

- ▣ $ECO = \Sigma (.50PD + .30PQ + .20PC)$

- **Theory of Regulatory Compliance**

- ▣ $RC = DM (KI/RA) > CI (PQ/CO)$

RELATED PUBLICATIONS AND REPORTS

- Barnard, Smith, Fiene, Swanson (2006). Evaluation of Pennsylvania's Keystone STARS Quality Rating and Improvement System, Pittsburgh: Pennsylvania, Office of Child Development.
- Class (1957). Licensing, unpublished manuscript, USC: University of Southern California.
- Fiene (2013a). A comparison of international child care and US child care using the Child Care Aware – NACCRRA (National Association of Child Care Resource and Referral Agencies) child care benchmarks, *International Journal of Child Care and Education Policy*, 7(1), 1-15.
- Fiene (2013b). *Differential monitoring logic model and algorithm*. Middletown: Pennsylvania, Research Institute for Key Indicators.
- Fiene (2013c). Head Start Key Indicators. Middletown: Pennsylvania, Research Institute for Key Indicators.
- Fiene (2013d). Kansas Child Care Key Indicators. Middletown: Pennsylvania, Research Institute for Key Indicators.
- Fiene (2013e). Validation of Georgia's core rule differential monitoring system. Middletown: Pennsylvania, Research Institute for Key Indicators.
- Fiene (2007). Child Development Program Evaluation & Caregiver Observation Scale, in T Halle (Ed.), *Early Care and Education Quality Measures Compendium*, Washington, D.C.: Child Trends.
- Fiene (2003). Licensing related indicators of quality child care, *Child Care Bulletin*, Winter 2002-2003, pps 12-13.
- Fiene (2002a). *Thirteen indicators of quality child care: Research update*. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services.
- Fiene (2002b). Improving child care quality through an infant caregiver mentoring project, *Child and Youth Care Forum*, 31(2), 75-83.

RELATED PUBLICATIONS AND REPORTS (cont)

- Fiene, Iutovich, Johnson, & Koppel (1998). Child day care quality linked to opportunities for professional development: An applied community psychology example. *Community Psychologist*, 31(1), 10-11.
- Fiene (1996). Using a statistical-indicator methodology for accreditation, in *NAEYC Accreditation: A Decade of Learning and the Years Ahead*, S. Bredekamp & B. Willer, editors, Washington, D.C.: National Association for the Education of Young Children.
- Fiene (1995). Utilizing a statewide training system to improve child day care quality: The other system in a program quality improvement model. *Child Welfare*, Volume LXXIV, #6, November-December, 1189-1201.
- Fiene (1985). Measuring the effectiveness of regulations, *New England Journal of Human Services*, 5(2), 38-39.
- Fiene (1981). A new tool for day care monitoring introduced by children's consortium, *Evaluation Practice*, 1(2), 10-11.
- Fiene, Greenberg, Bergsten, Carl, Fegley, & Gibbons (2002). *The Pennsylvania early childhood quality settings study*, Harrisburg, Pennsylvania: Governor's Task Force on Early Care and Education.
- Fiene & Kroh (2000). Licensing Measurement and Systems, *NARA Licensing Curriculum*. Washington, D.C.: National Association for Regulatory Administration.
- Fiene & Nixon (1985). Instrument based program monitoring and the indicator checklist for child care, *Child Care Quarterly*, 14(3), 198-214.
- Griffin & Fiene (1995). *A systematic approach to policy planning and quality improvement for child care: A technical manual for state administrators*. Washington, D.C.: National Center for Clinical Infant Programs-Zero to Three.
- Kontos & Fiene (1987). Child care quality, compliance with regulations, and children's development: The Pennsylvania Study, in *Quality in Child Care: What Does Research Tell Us?*, Phillips, editor, Washington, D.C.: National Association for the Education of Young Children.
- Zellman, G. L. and Fiene, R. (2012). *Validation of Quality Rating and Improvement Systems for Early Care and Education and School-Age Care*, Research-to-Policy, Research-to-Practice Brief OPRE 2012. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services

Resources

For the interested reader, please consult the following excellent publications by the Assistant Secretary's Office for Planning and Evaluation, the Office of Child Care, and the National Resource Center for Health and Safety in Child Care that will provide additional insights into program monitoring in general, differential monitoring in particular, risk assessment and key indicator systems:

ACF/Caring for Our Children Basics:

<https://www.acf.hhs.gov/programs/eecd/caring-for-our-children-basics>

NRC/Stepping Stones to Caring for Our Children:

<http://nrckids.org/index.cfm/products/stepping-stones-to-caring-for-our-children-3rd-edition-ss3/>

ASPE/Thirteen Key Indicators of Quality:

<http://aspe.hhs.gov/basic-report/13-indicators-quality-child-care>

ASPE/Monitoring White Paper:

http://aspe.hhs.gov/hsp/15/ece_monitoring/rpt_ece_monitoring.cfm

OCC/Differential Monitoring, Risk Assessment and Key Indicators:

https://childcareta.acf.hhs.gov/sites/default/files/public/1408_differential_monitoring_final_1.pdf

For Additional Information:

149

Richard Fiene, Ph.D., Research Psychologist

Research Institute for Key Indicators LLC (RIKI)

Email:

RFiene@RIKInstitute.com or RFiene@NARALicensing.org

Websites:

RIKInstitute.com or <https://www.naralicensing.org/key-indicators>

Go to these websites for additional research reports about the slides in this document as well as the NARA Licensing Measurement course.



nara
RIKI

The logo for nara RIKI features the word "nara" in a lowercase, black, sans-serif font. Above the "nara" text is a thin, dark red curved line that starts under the 'n' and ends under the 'a'. Below "nara" is the word "RIKI" in a bold, black, serif font.

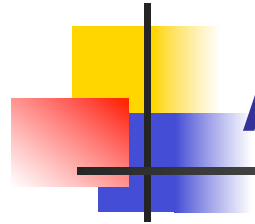
THE FOLLOWING SLIDES
ARE FROM EARLIER PENN
STATE PRESENTATIONS ON
LICENSING MEASUREMENT
AND SYSTEMS



Licensing Measurement

- **Licensing Risk Assessment**
- **Licensing Indicator Systems**

Richard Fiene, Ph.D.
The Pennsylvania State University

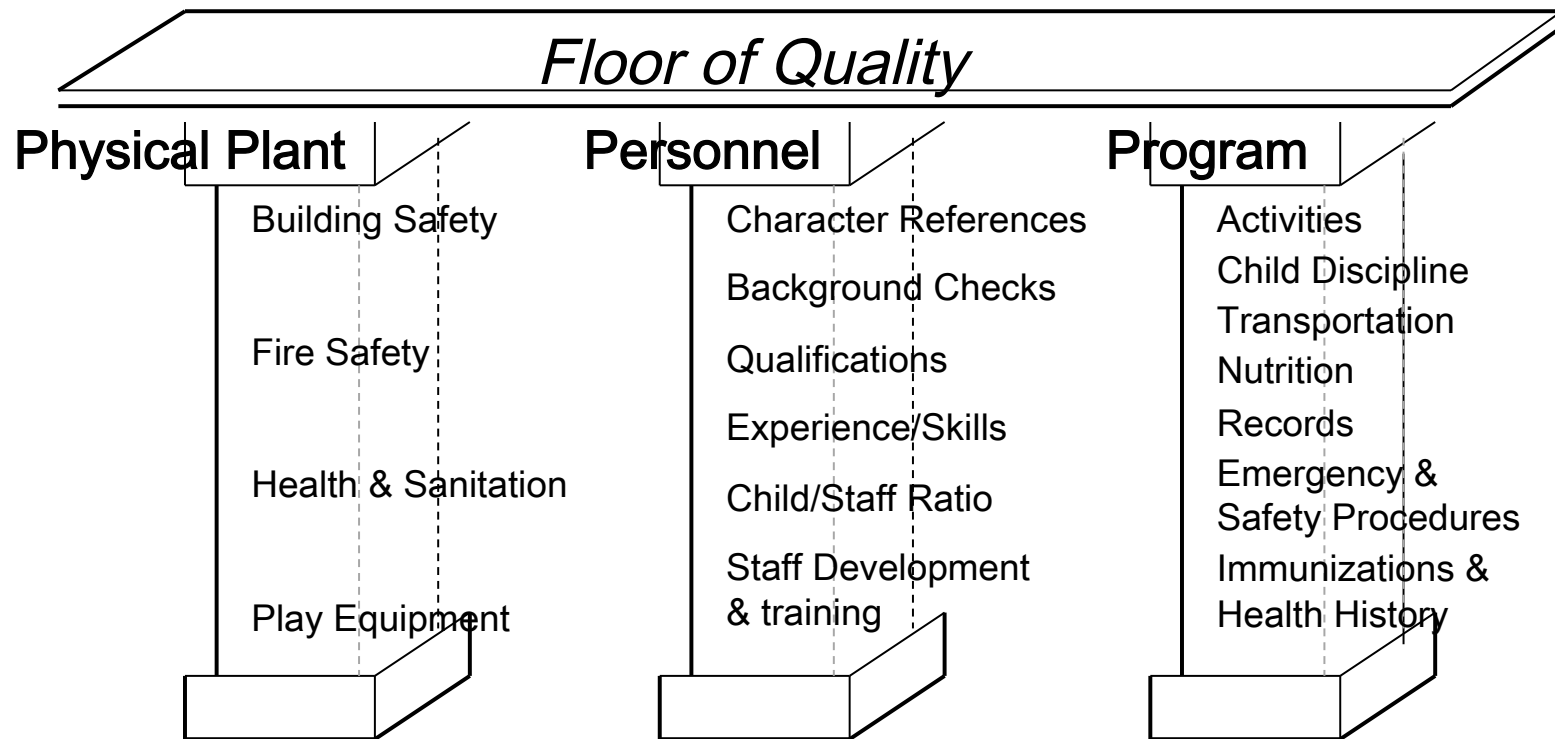


Achieving Quality Child Care

- Quality care is achieved by both regulatory and non-regulatory approaches. However, licensing provides the threshold or floor of quality below which no program should be permitted to operate.

Floor of Quality

Reducing the risks of harm through effective regulation; the equitable enforcement of licensing standards:

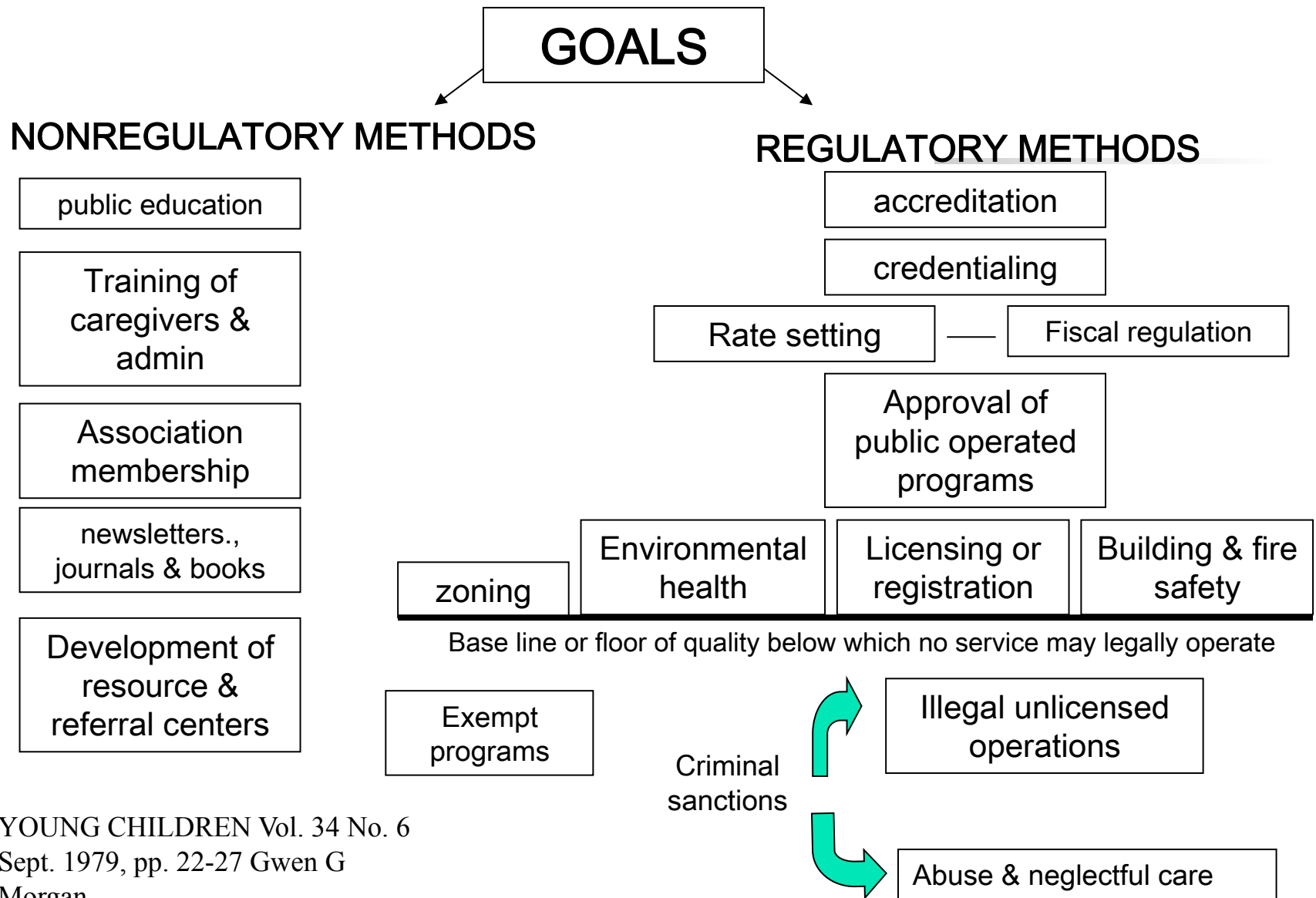


Three Tiers of Quality Standards

Type of Standard	To Whom Applies	By Whom Established	Legal Base	Process of Writing
Accreditation Standards	All who voluntarily seek it	Varies; best done by peer group	Voluntary participation	Professional
Purchase Standards	All programs using government funds from contract or voucher	Funding agency	Contract relationship	Agency specifies by internal process; may be affected by negotiations with providers
Licensing Standards	All programs	Licensing Agency	Delegated authority from the Legislature	All interested in democratic process that includes parents providers, experts

(Morgan, 1985, pg.16)

Methods for achieving quality child care



YOUNG CHILDREN Vol. 34 No. 6
Sept. 1979, pp. 22-27 Gwen G
Morgan



Other regulatory approaches toward achieving quality

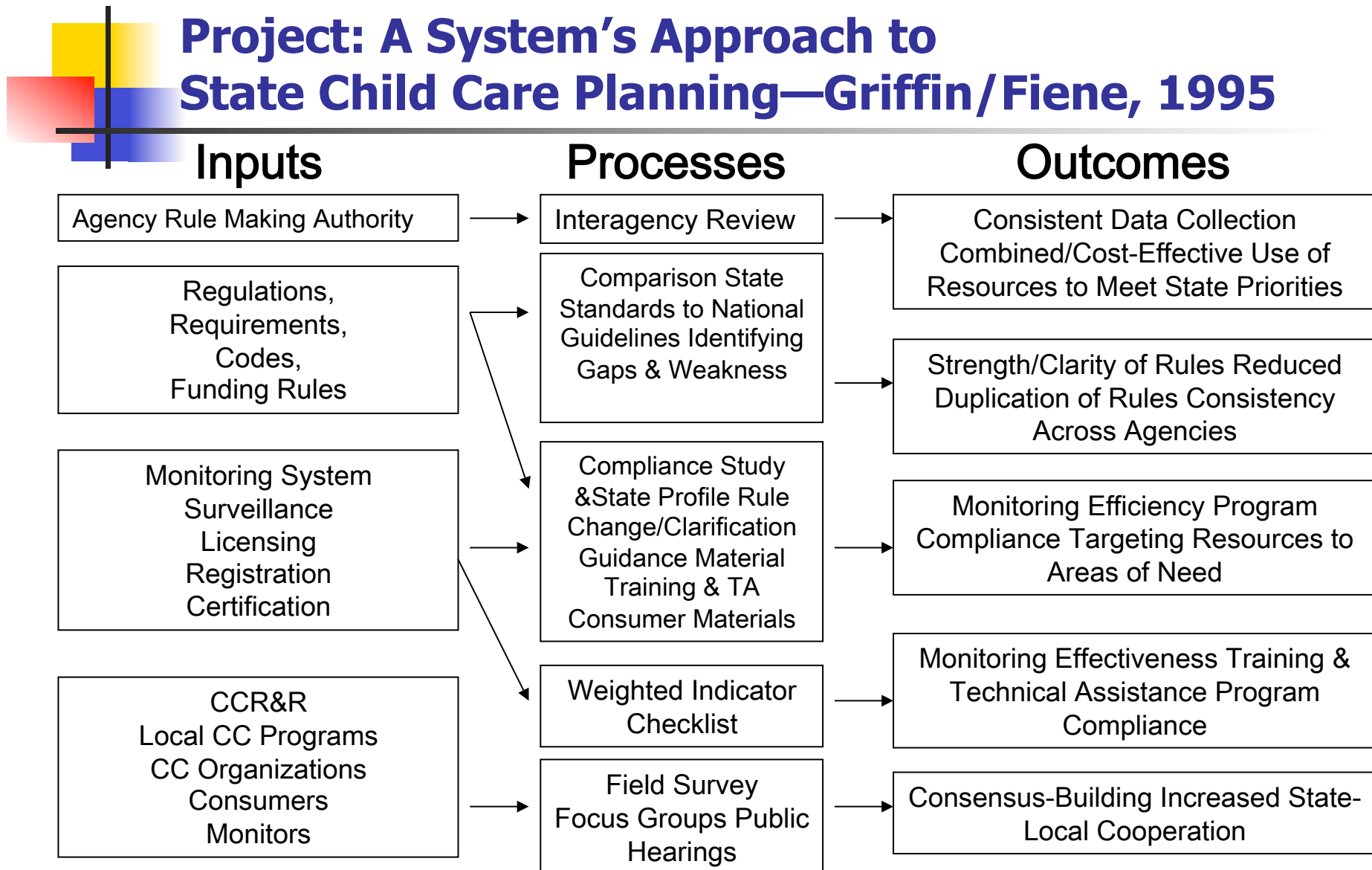
- **Credentialing:** A formally recognized process of certifying an individual as having fulfilled certain criteria or requisites
- **Purchasing of service contracts:** Regulation by contract in which performance standards are imposed as a contractual obligation
- **Accreditation:** The formal recognition that an agency or organization has compiled with the requisites for accreditation by an accrediting body. Accreditation usually requires the organization seeking this form of recognition to pay for the cost of the process. The organization bestowing the accreditation has no legal authority to compel compliance. It can only remove accreditation standing
- **Best Practices:** Through affiliation with professional organizations, an agency becomes aware of “best practices” and establishes its own goals to achieve a higher level of care services



Non-regulatory approaches to achieving quality care in human services facilities or programs

- Consultation
- Consumer Education
- Peer Support Associations
- Professional Organizations
- Resource and Referral
- Technical Assistance
- Training-Staff Development

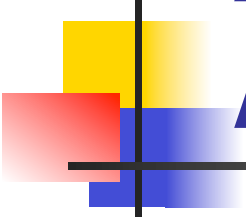
ZERO TO THREE's Better Care for the Babies Project: A System's Approach to State Child Care Planning—Griffin/Fiene, 1995





Advantages of Instrument Based Program Monitoring

- **Cost Savings**
- **Improved Program Performance**
- **Improved Regulatory Climate**
- **Improved Information for Policy and Financial Decisions**
- **Quantitative Approach**
- **State Comparisons**



Advantages of Weighted Risk Assessment System

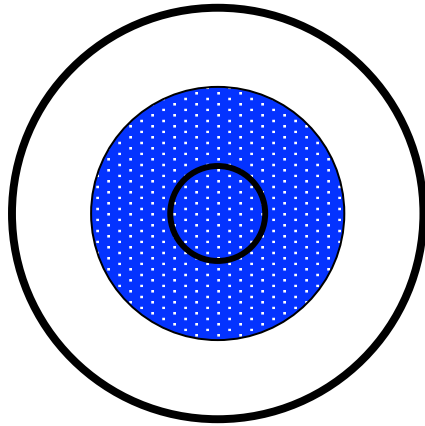
- **Identification of the Regulations Having Greatest Risk to Children**
- **Empirical Evidence for Making Revisions in Regulations Based Upon Relative Risk**



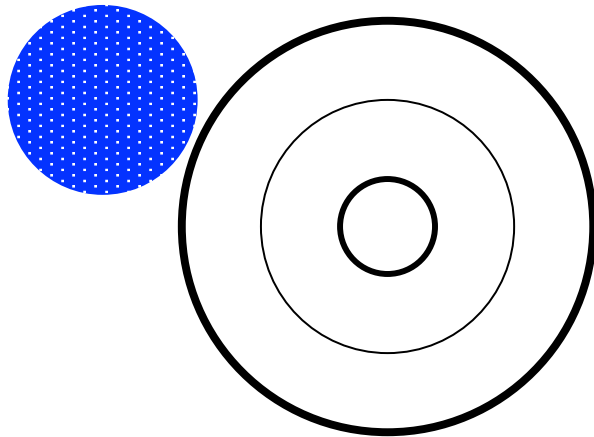
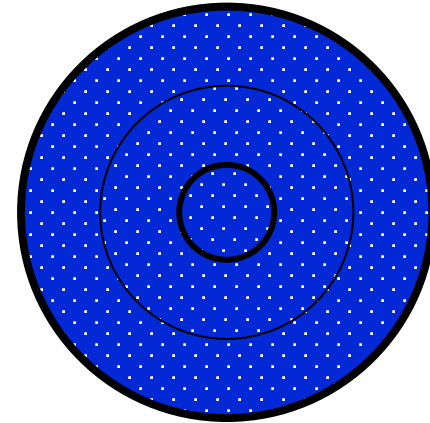
Advantages of Indicator Checklist System

- **Quality of Licensing is Maintained**
- **Balance Between Program Compliance and Quality**
- **Cost Reduction**
- **Targeted Predictor Regulations Can Be Tied to Outcomes**

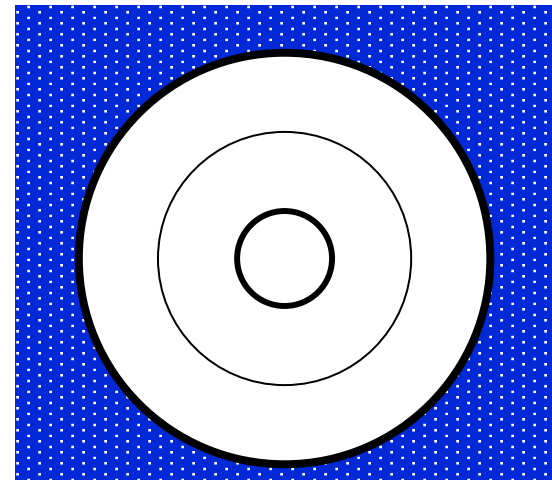
Valid & Reliable



Valid & Not Reliable



Not Valid & Reliable

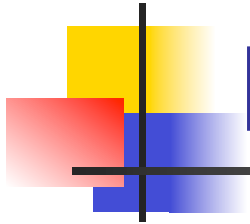


Not Valid & Not Reliable

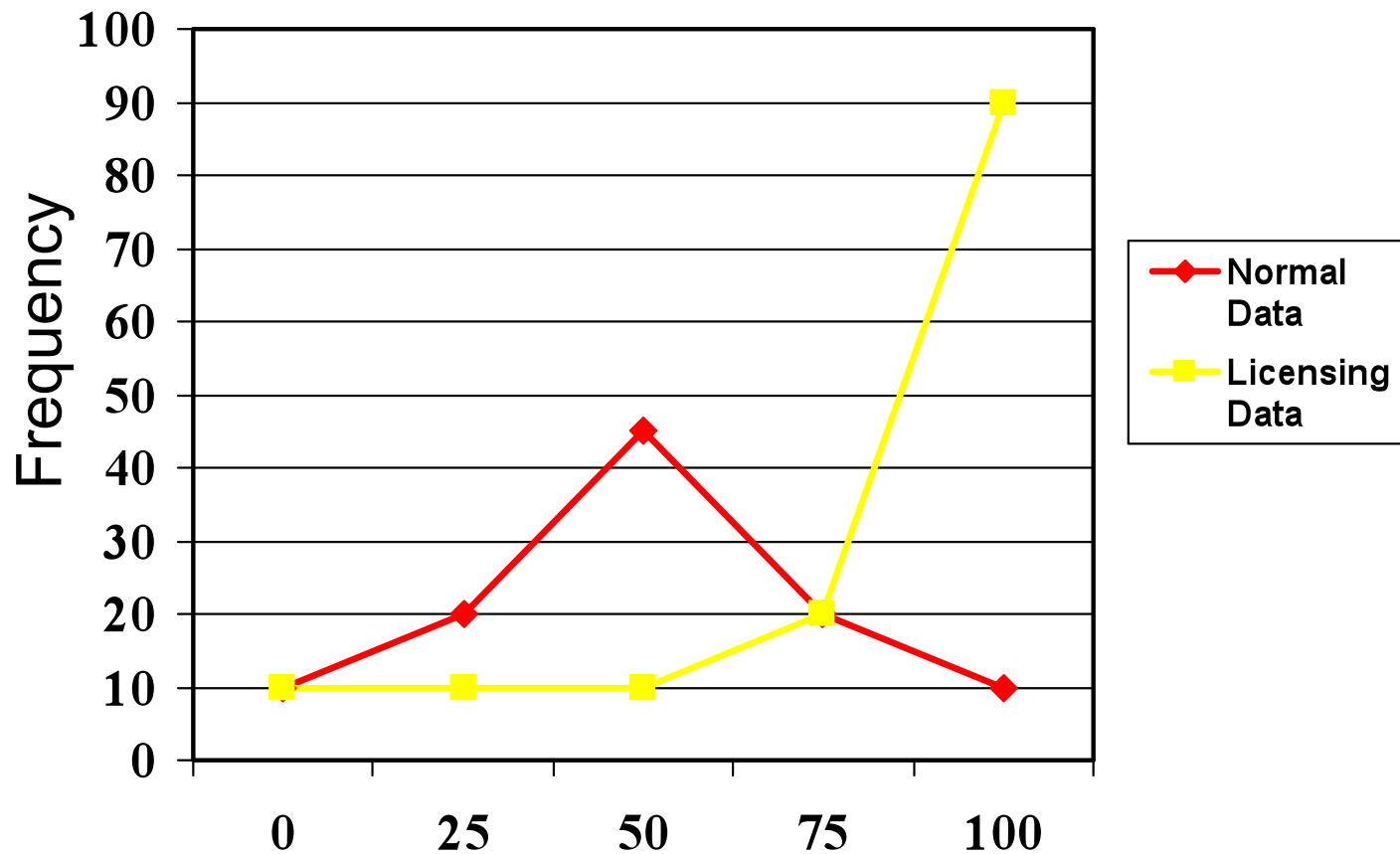


How to Calculate Inter-Rater Reliability (I.R.R.)

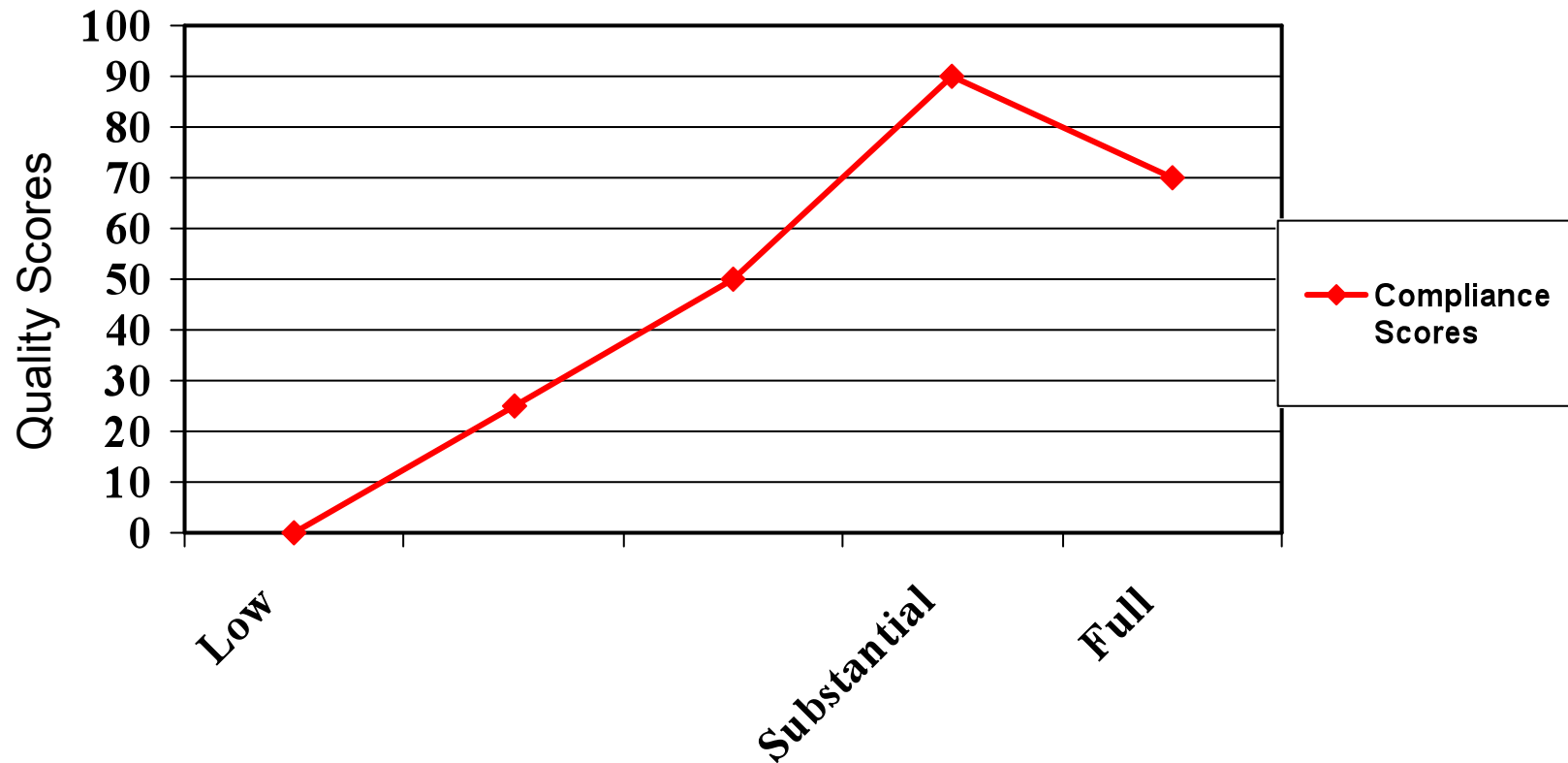
$$\frac{\text{Agreements}}{\text{Agreements} + \text{Disagreements}} = \text{I.R.R.}$$



Normal vs. Skewed Curves



Compliance and Quality Relationship



Reasons and Prerequisites for the Development of a Licensing Risk Assessment System

- 1) If you do not weight rules, by default, you have given an equal weight to each rule
- 2) A nominal score/weight is assigned to each licensing regulation based upon relative health, safety, and welfare risk to the clients if a facility is not in compliance with the regulation
- 3) Regular or full licenses are issued with less than 100% compliance
- 4) There are a large number of licensing regulations with a variation of degrees of risk associated with various regulations
- 5) A standardized measurement system or inspection tool is used to measure compliance with licensing regulations

13. The center premises shall be free of plants and shrubs which are poisonous or hazardous

Low
Risk

1

2

3

4

5

6

7

High
Risk

8

No
Basis
for

Judgment

14. When permanent swimming or wading pools are located on the center premises, applicable local regulations regarding design, construction, operation and maintenance shall be followed

Low
Risk

1

2

3

4

5

6

7

High
Risk

8

No
Basis
for

Judgment

15. All swimming and wading pools shall be:
(I) inaccessible to children except during supervised activities

Low
Risk

1

2

3

4

5

6

7

High
Risk

8

No
Basis
for

Judgment

15. All swimming and wading pools shall be:

(ii) Operated and maintained in accordance with acceptable health standards

Low
Risk

1

2

3

4

5

6

7

High
Risk

8

No
Basis
for

Judgment

16. The center shall have available at all times:

(i) A licensed driver

Low
Risk

1

2

3

4

5

6

7

High
Risk

8

No
Basis
for

Judgment



Pennsylvania Human Services Licensing Information System Initial Demonstration of Inspector's System

Microsoft Access

File Edit View Inspector Tasks Window Help

Facility List

Facility ID	License	Legal Name	Facility Street	Facility City
123	44423800001-991	Some Facility, Inc.	Suite 123	Anytown

Perform Facility Inspection

123 Facility: Some Facility, Inc. Chapter: 2390 Inspection Type Intended: F - Full Inspection Score: 70
 Date Inspection: 2/1/98 Permissible Pct NM: 5% Inspection Type Actual: F - Full Inspection

Section	Reg	Ind	Regulation Summary:	Wgt	Area	Inspection Result				Y/N	Review Problems:
						C	V	NM	NA		
11	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Application			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
14 (a)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fire safety app. L&I			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
14 (b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Written annual ver on file	7		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
15 (a)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Inter com-Fed W.&H. cert	6		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
15 (b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Intra com-spec cert	5		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
15 (c)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Inter-intra-Fed/State cert	5		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
16	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pub eating & drink license	7		<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
17	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Writ statement of purpose			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	One button must be checked.
18	<input checked="" type="checkbox"/>	<input type="checkbox"/>	U.I.-24 hours			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
18 (a)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	U.I. report			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
18 (b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	U.I.-weekends			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Abuse rept.-sup or deny			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
19 (a)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Abuse-past 12 months			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	One button must be checked.
19 (b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Abuse reported-24 hours			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	One button must be checked.
19 (c)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Investigated abuse-24 hours			<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	One button must be checked.
194	40	0		30		7	6	0	0	183	

Refresh Clear Results Clear Review Review Violation Notes Close

Form View

This frame shows the Inspection Score Sheet. It shows all the regulations for the chapter used in this inspection.

For each regulation it includes an indicator as to whether or not that regulation is an indicator item. It also shows the regulation summary text and regulation subject area.

Use the buttons under the "Inspection Result" section to record the inspection result for each regulation. Check "C" for compliance, "V" for violation, "NM" for not measured or "NA" for not applicable. When a violation is indicated the regulation violation weight is shown. As you make your selections the totals and score will be computed.



Utilizing A Risk Assessment System to Make Licensing Decisions

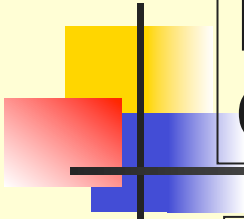
Non-Compliance Areas	Weights	
Reg. 2370.51 Staff child ratios	7	
Reg. 2370.31 Training		<u>6</u>
Reg. 2370.102 Immunizations		+8
Sum of weights	21	
Perfect score		<u>100</u>
Non compliance with regs		-21
Total Score for program	79	

Decision:

Score of 100-90 = Regular License

Score of 89-80 = Provisional License

Score of 79 or below = No License



Licensing Inspection Instrument Scoresheet for Community Homes Chapter 6400

General Requirements

- 11 C 5 Chapter 20
- 13 C 6 Capacity
- 16 C 3 Abuse
- 17 C 3 Child Abuse

Reporting

Individual Rights

- 31(a) C 6 Ind. Informed
- 32 C 8 Deprived of
Rights
- 33(f) C 7 Privacy

Facility Name/Address:

Date Inspected:

Inspected By:

Staffing

- 42 C 5 18 Years
- 43(a) C 5 CEO
- 46(d) C 5 Staff training
–24 hours



Prerequisites for Implementing A Licensing Indicator System

- Licensing rules must be comprehensive, well written, and measurable
- There must be a measurable tool designed to standardize the application and interpretation of the rules
- There should be a licensing weighting system designed to assess the relative risk to clients if the rule is not met
- At least one year of data on violations for individual facilities

Regulations	Groups	
	High	Low
In	X X X	
Out		X X X



How to Develop A Licensing Indicator System

- 1) **Select 100-200 facilities to be used in determining the indicators**
- 2) **Collect non-compliance data for the sampled facilities. Sort by high and low compliance**
- 3) **Statistical predictor rules based upon individual compliance**
- 4) **Additional items**
- 5) **Random items**
- 6) **Develop specific criteria**



Criteria for Using the Licensing Indicator Instrument

- The facility had:
 - Had a regular license for the previous two years
 - Had the some director for the last 18 months
 - Had 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

Licensing Compliance Prediction Instrument Scoresheet for Vocational Facilities

General Requirements

- 14a C NC Fire Safety
- 18a C NC Unusual
 Incident
- 22f C NC Annual Prog.
 Report

Program

- 94d(3) C NC Vocational
 Interest
- 94e C NC Written
 Statement
 Signed

Facility Name/Address:

Date Inspected:

Inspected By:

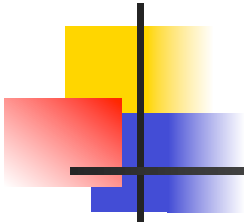
Staffing

- 40a C NC Orientation for
 Staff

Health

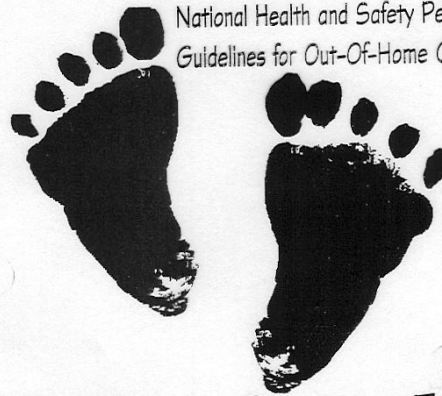
- 101 C NC Communicable
 disease

On-Site Inspection Report



STEPPING STONES to Using Caring for our Children

National Health and Safety Performance Standards
Guidelines for Out-Of-Home Child Care Programs



PROTECTING CHILDREN FROM HARM

U.S. Department of Health & Human Services
Public Health Service
HRSA
Health Resources & Services Administration
Maternal and Child Health Bureau

STATE OF DELAWARE
OFFICE OF CHILD CARE LICENSING
DEPARTMENT OF SERVICES FOR
CHILDREN, YOUTH AND THEIR FAMILIES

**INDICATOR CHECKLIST
For Compliance Assessment**

DAY CARE CENTERS

Center Name:

Address:

Telephone:

Chief Administrator:

License Number:

Enrollment:

License Component:

Purpose of Review:

Reviewer:

Annual/Announced

Parent Organization

Program Director:

Capacity:

Age Range:

Complaint

Date of Determination:

Expiration:

Hours:

Unannounced

C – Compliance

NC – Noncompliance

NA- Not Applicable

ND – Not Determined

Requirement Number	Compliance Status	Comments
69. Does Center have a personnel file for each employee and volunteer which includes the following: A. Name, date of birth, home address and phone number? B. Date of Hire F. Documentation of Qualifications H. No criminal history statement		
71. Does the Center have written job descriptions for each position?		

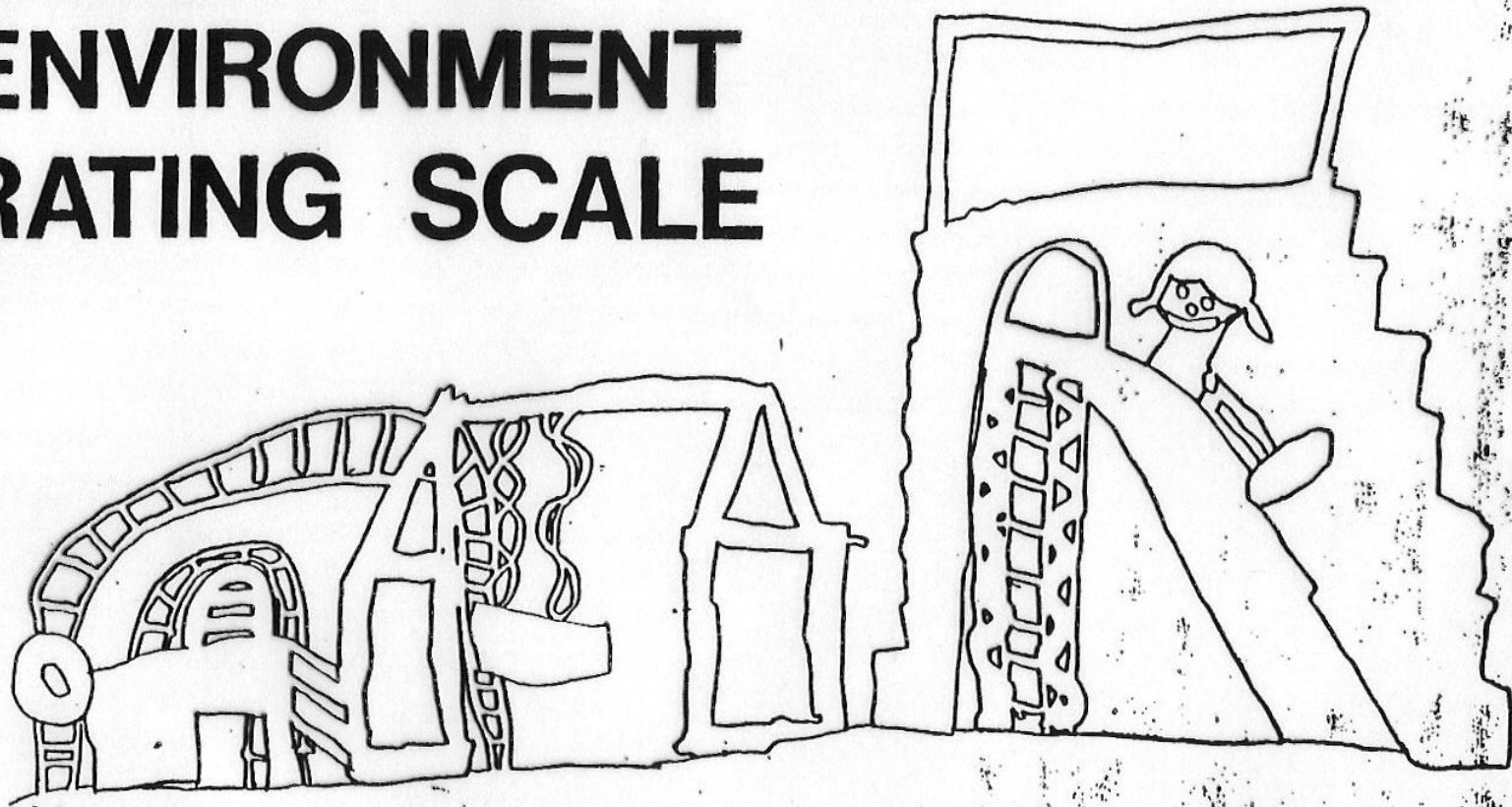
CAREGIVER OBSERVATION FORM AND SCALE (COFAS)

This form is designed to be used by the monitor in recording specific observations of caregivers' child development activities during a 30-minute period.

No. of children present at the beginning of the caregiver observation 7
 No. of adults present at the beginning of a caregiver observation 2
 Time of observation 9:30 AM Name of caregiver Louise Martin

During your observation did the caregiver:		Two-minute Observation Periods										Weights	
		1	2	3	4	5	6	7	8	9	10		
LANGUAGE	Speak unsolicited to a child	01	/	/	3	4	/	/	3	/	/	4	+2
	Use the child's dialect	02	3	3	/	/	3	/	/	3	/	3	+1
	Respond verbally to a child's speech	03	/	/	3	/	3	/	3	/	/	3	+2
	Read or identify pictures to a child	04	3	3	3	3	3	3	3	/	/	/	+1
	Sing or play music with a child	05	3	3	3	3	3	3	3	3	3	3	+1
	Speak slowly and clearly to a child at all times	06	3	3	3	3	3	/	3	3	3	3	+1
	Interrupt or cut off a child's verbalization	07	4	3	3	3	3	3	3	3	3	/	-3
	Scream or yell at children	08	3	3	3	3	3	3	3	3	3	3	-30
	Allow noise level to become so high it is hard for observer to understand children	09	3	3	/	3	3	3	3	3	3	3	-1
SOCIO-EMOTIONAL	Give affectionate physical contact to child	10	3	3	4	3	/	4	/	/	/	/	+3
	Make activity suggestion to a child	11	3	/	3	3	3	3	/	3	3	3	+1
	Physically punish a child	12	3	3	3	3	3	3	3	3	3	3	-100
	Use food as reinforcement	13	/	/	3	3	3	3	3	3	3	3	-3
	Make fun of or ridicule a child	14	3	3	3	3	3	3	3	3	3	3	-30
	Let other children make fun of or ridicule a child	15	3	3	3	3	3	3	3	3	3	3	-30
	Verbally criticize, scold or threaten a child	16	3	3	3	3	3	3	3	3	3	3	-30
	Isolate a child physically	17	3	3	3	3	3	3	3	3	3	3	-1
	Ignore a child's request	18	3	3	3	3	3	3	3	4	3	3	-5
	Interrupt a child's activity and prevent its completion	19	3	3	3	3	4	3	3	3	3	3	-5
	Leave the child alone	20	3	3	3	3	3	3	3	3	3	3	-40
MOTOR	Foster development of child's gross motor skills	21	/	/	/	/	/	3	3	3	3	3	+1
COGNITIVE	Show impatience or annoyance with child's questions	22	3	3	3	3	4	4	3	3	3	3	-2
	Use terms which are above a child's reasoning ability	23	3	3	3	3	4	3	3	3	3	3	-3
	Deal in abstract concepts without concrete examples	24	3	3	3	3	3	3	3	3	3	3	-3
	Show intolerance with a child's mistakes and not accepting faulty thinking	25	3	3	3	3	3	3	3	3	3	3	-2
	CARE-GIVING	Prepare or serve food for a child	26	/	/	3	3	3	3	3	3	3	3
Prepare activities or arrange the room		27	3	3	/	3	3	3	/	/	3	3	0
Do nothing		28	3	3	3	3	3	3	3	3	3	3	-15
Talk with other adults		29	3	3	3	3	3	3	3	3	3	3	-5
Record the type of activity: (e.g., listening to records, reading a story, art project, etc.)		Snack Cognitive Games											

EARLY CHILDHOOD ENVIRONMENT RATING SCALE



THELMA HARMS

RICHARD M. CLIFFORD

SUPERVISION AND TECHNICAL ASSISTANCE HANDBOOK

PA Regulation §3270.51 Similar age level					Supervision (Measure Compliance)	Technical Assistance (suggestions to comply)	Consultation (quality-AAP.APHA Standards)	Harm Being Avoided		
When Children are grouped in similar age levels, the following maximum child group sizes and ratios of staff persons apply:					1. Observe each classroom and count the number of caregivers and number of children. Compare the observed number with the regulatory requirement. 2. Check the group size... 3. Try to make repeated observations during the day.. 4. A care giver must be able to identify the children in her group...	1. Point out to the director when staff child ratios and group size requirements are not met. Discuss ways to adjust staffing or enrollment to meet the requirement. 2. Suggest adjusting staff duties so that more staff can be caregiving at peak times, leaving administrative tasks...	ST2 Child-Staff ratios for centers shall be maintained as follows during all hours of operation: The ratios in the standards assume caregivers who have limited bookkeeping and housekeeping duties, so they are free to provide direct care for children. The standards are based on what children need to have quality care			Insufficient staff and large group size are associated with: 1. Infection 2. Injury 3. Delayed development 4. Stress for children
Similar Age Level	Staff	Max Children	Group size	Total # of Staff			Age	Ratio	Max size	
Infant	1	4	8	2			B-24m	3:1	6	
Yng Tod.	1	5	10	2			25-30	4:1	8	
Old. Tod.	1	6	12	2			3 yrs	7:1	14	
Preschool	1	10	20	2			9-12 yrs	12:1	24	
YngSA	1	12	24	2			Direct, warm social interaction between adults and children is more common and likely with lower child:staff ratios.			
Old. SA	1	15	30	2						

CHILD DEVELOPMENT PROGRAM EVALUATION SCALE

		Out	In
<u>Licensing Scale</u>	Sub Scale Code	Compliance	
1. Health Appraisal	H	O	3
2. Observations (Level I-3; Levels II-IV-0)	CD	O	3
3. Emergency Contact	H	O	3
10. Nutrition	N	O	3

Program Quality Scale		Quality Levels							
14. Child Development Program		A		0	1	2	3	4	5
15. Employee Performance Evaluation		A		0	1	2	3	4	5
17. Staff Development		A		0	1	2	3	4	5
18 Social Emotional Development		A		0	1	2	3	4	5
19. Identification of Child’s Needs		CD		0	1	2	3	4	5
22. Cognitive Development		CD		0	1	2	3	4	5
23. Language Development		CD		0	1	2	3	4	5
24. Art		CD		0	1	2	3	4	5
25 Music		CD		0	1	2	3	4	5
34. Family Confidentiality		CD		0	1	2	3	4	5
36. Parent Involvement		SS		0	1	2	3	4	5
		SS		0	1	2	3	4	5
Administration (A)	Child Development Curriculum (CD)	Social Service (SS)							

Name of Facility		Room	Age of Children youngest to oldest	Name of Rater	Position of Rater	Date
1. Greeting/departing 1 2 3 4 5 6 7	3. Nap/rest 1 2 3 4 5 6 7	5. Personal grooming 1 2 3 4 5 6 7	7. or ♦7. Furnishings (learning) 1 2 3 4 5 6 7	9. Room arrangement 1 2 3 4 5 6 7	11. Understanding language 1 2 3 4 5 6 7	
2. or ♦2. Meals/snacks 1 2 3 4 5 6 7	4. Diapering/toileting 1 2 3 4 5 6 7	Total Personal Care (Items 1-5)	8. Furnishings (relaxation) 1 2 3 4 5 6 7	10. or ♦10. Child related display 1 2 3 4 5 6 7	12. Using language 1 2 3 4 5 6 7	
		6. Furnishings (routine) 1 2 3 4 5 6 7		Total Furnishings/display (Items 6-10)		

B. Curriculum continued

CRITERION

B-7 Staff provide a variety of developmentally appropriate hands-on activities for children to achieve the following goals:
(Rate each goal separately considering the examples related to the age group being observed.)

B-7a. Foster positive self-concept.

RATING		
Not met	Partially met	Fully met
1	2	3

COMMENTS

Classroom

For example:

Infants/younger toddlers

Hold, pat, and touch babies for comfort and stimulation.
Talk and sing to babies.
Make each baby's actions and sounds.
Play mirror games, label facial features and body parts.
Allow infants to feed themselves when ready.
Encourage and support each baby's developmental achievements such as pulling up self.

Older toddlers/preschoolers

Allow time for children to talk about what they see, do, and like.
Use children's names frequently in songs, games.
Display children's work and photos of children.
Encourage children to draw pictures, tell stories about self and family.

School-agers

Provide opportunities to express growing independence/self-reliance such as the ability to make choices, initiate own activities.
Allow opportunities to work or play alone.

B-7b. Develop social skills.

1	2	3
---	---	---

Classroom

For example:

Infants/younger toddlers

Hold, pat, and touch babies.
Talk to, sing to, and play with each baby on a one-to-one basis.
Respond to and expand on cues coming from child.
Interpret infants' actions to other children to help them get along in the group ("Mary had it first").

Older toddlers/preschoolers

Assist toddlers in social interaction.
Create space and time for small groups of children to build blocks together or enjoy dramatic play.
Provide opportunities for sharing, caring, and helping, such as making cards for a sick child or caring for pets.

School-agers

Arrange planned and spontaneous activities in team sports, group games, interest clubs, board and card games.
Allow time to sit and talk with friend or adult.

ITEM	INADEQUATE		MINIMAL		GOOD		EXCELLENT
	1	2	3	4	5	6	7

Personal Care Routines	1	2	3	4	5	6	7
1. Greeting/departing	No plan made. Greeting children is often neglected; departure not prepared for	Informally understood that someone will greet and acknowledge departure		Plans made to insure warm greeting and organized departure		Everything in 5 (good) plus parents greeted as well as children	

Personal Care Routines	1	2	3	4	5	6	7
2. Meals/snacks	Meals/snacks served on a haphazard, irregular schedule and of questionable nutritional value	Well-balanced meals/snacks provided on a regular schedule but strict atmosphere, stress on conformity, meals not used as social time or to build self-help skills		Well-balanced meals/snacks provided on regular schedule. Staff sits with children and provides social environment. Small group size permits conversation		Everything plus time planned as a learning experience, including: self-help skills; talking about children's interests, events of the day and aspects of food	

Sample Scoring Strip													
1. Greeting/departing							2. Meals/snacks						
1	2	3	4	5	6	7	1	2	3	4	5	6	7



CHILDCARE KEY INDICATORS

STAFF TRAINING

DIRECTOR & LEAD TEACHER QUALIFICATIONS

STAFF:CHILD RATIO AND GROUP SIZE

CHILD ABUSE REPORTING & CLEARANCES

CHILDREN ARE PROPERLY IMMUNIZED

INACCESSIBILITY OF TOXIC SUBSTANCES

EMERGENCY PHONE NUMBERS/CONTACT INFO

FIRE DRILLS ARE CONDUCTED

CHILDREN ARE SUPERVISED AT ALL TIMES

DEVELOPMENTALLY APPROPRIATE DISCIPLINE USED

ADMINISTRATION OF MEDICATION

PROPER HAND WASHING/DIAPER CHANGING FOLLOWED

OUTDOOR PLAYGROUND IS PROPERLY MAINTAINED



PENNSTATE



For additional information, contact:
Richard Fiene, Ph.D. Director, Early Childhood Institute
Professor in Charge, Early Childhood Certificate Programs
Senior Research Associate, Prevention Research Center
The Pennsylvania State University
2001, North Front Street, Suite 314
Harrisburg, Pennsylvania 17102
717 233-5276

rjf8@psu.edu

<http://ecti.hbg.psu.edu> or <http://caecti.org>