Compliance Measurement and Monitoring Platform

Differential Monitoring Systems 2.0

from theory to practice

Background

- President at Outlier Technologies and original author of SansWrite
- 25+ years of experience automating the full Compliance Monitoring Cycle
- Trusted Advisor to Regulatory Agencies and Regulated Businesses throughout the US and Canada
- Former National Association for Regulatory Administration (NARA) Board Member, Treasurer and Chair of the Finance Committee

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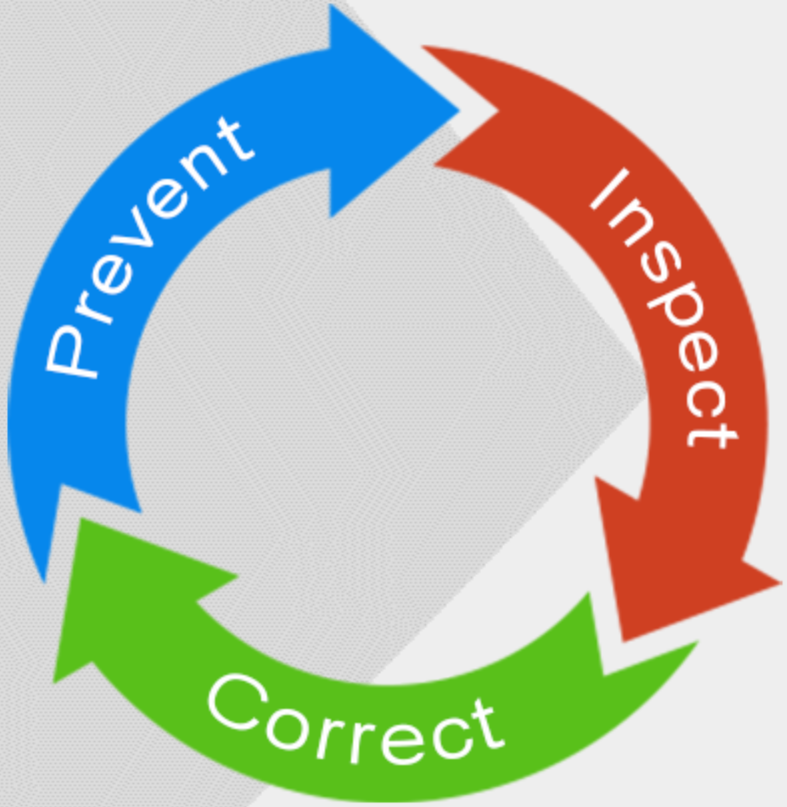
Compliance Monitoring Cycle



Foundation of Continuous Quality Improvement (CQI)

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Brief History of Compliance Monitoring

State Boards of Charity

1865

Dr. Abraham Flexner

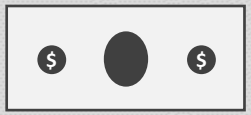
1915

Norris Class

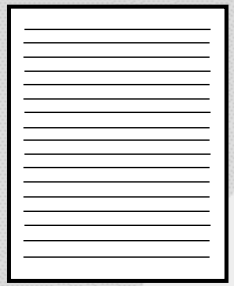
1968

Dr. Richard Fiene

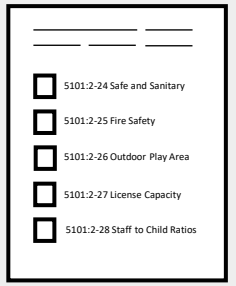
1985



Funding



Clinical Notes



Uniform Monitoring
(Instrument Based)

Differential Monitoring
(Indicator Based)

Sources:

Simmons University
https://online.simmons.edu/blog/evolution-social-work-historical-milestones/

University of Southern California
https://libraries.usc.edu/california-social-welfare-archives-oral-history-catalog/norris-class

Research Institute for Key Indicators
https://rikinstitute.com/wp-content/uploads/2018/04/dr-richard-fiene1-wikipedia.pdf

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Administration for Children & Families

Monitoring Practices Used in Child Care and Early Education Licensing

https://acf.gov/opre/report/trlece-brief-series-state-approaches-child-care-early-education-ccee-licensing

What is Differential Monitoring?

A process that varies the scope and frequency of inspections based on relevant factors and past performance.

Uniform Monitoring

- Same Scope
- Same Frequency
- Same Inspector

Differential Monitoring

- Varying Scope
- Varying Frequency
- Varying Inspectors

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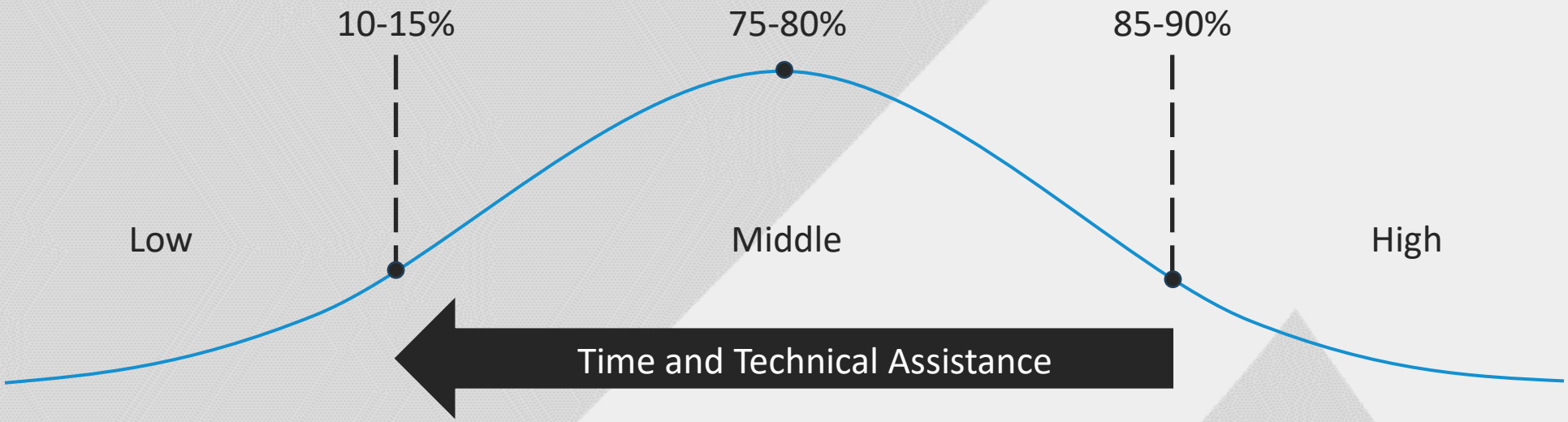
Why Differential Monitoring?

Enables regulatory agencies to be more efficient when monitoring “high” performing providers so more time and technical assistance can be given to “low” performing providers.



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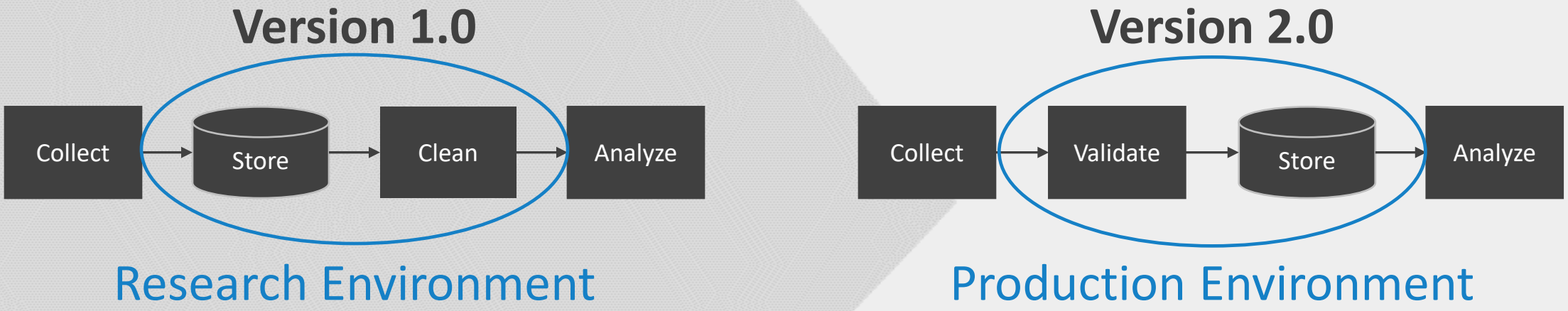
Differential Monitoring Systems 2.0



For more information on the science and research visit:

www.rikinstitute.com

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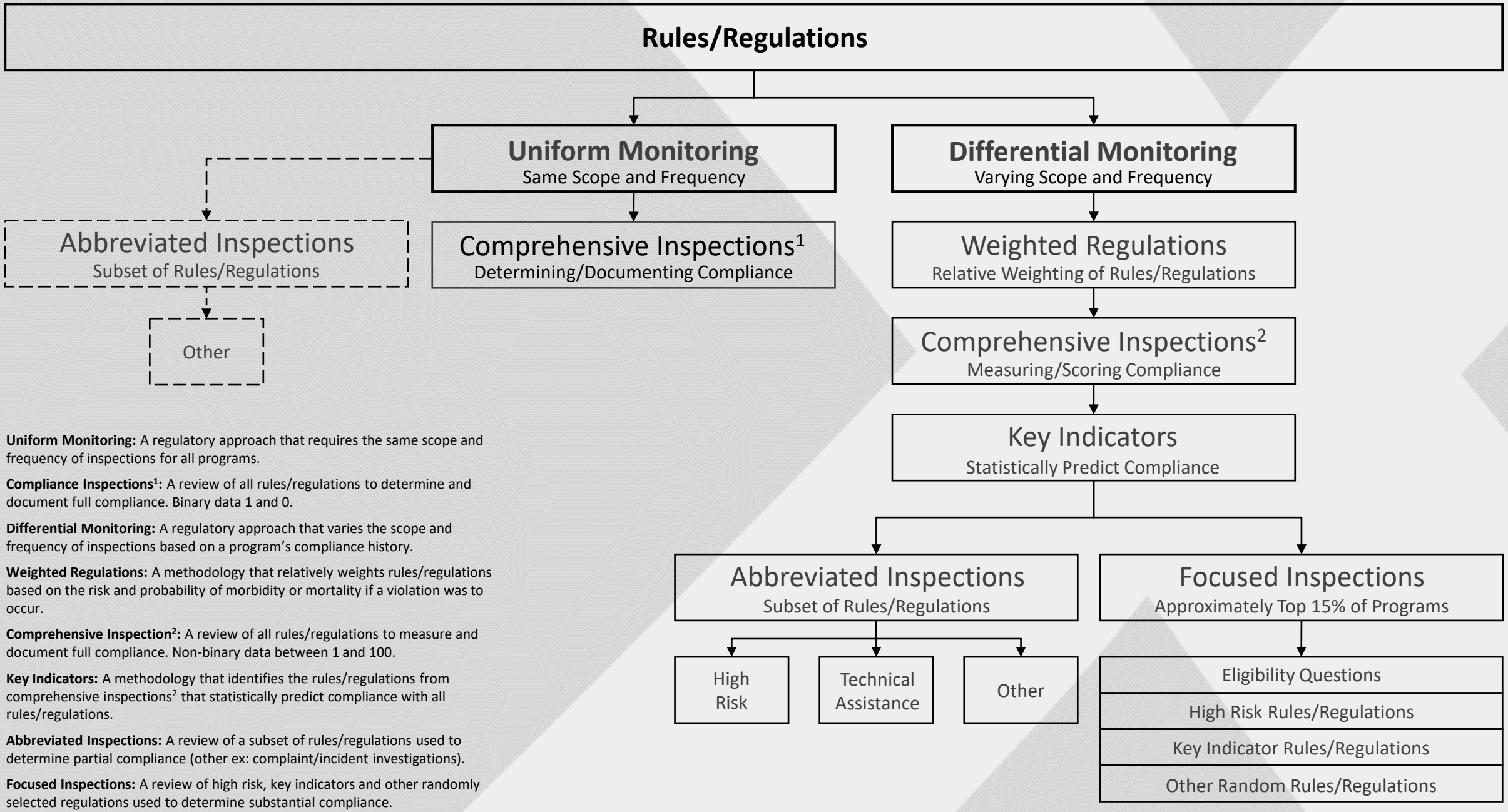
Regulatory Compliance Monitoring Approaches



Uniform Monitoring: A regulatory approach that requires the same scope and frequency of inspections for all programs.

Compliance Inspections[1]: A review of all rules/regulations to determine and document full compliance. Binary data 1 and 0.

Differential Monitoring: A regulatory approach that varies the scope and frequency of inspections based on a program's compliance history.

Weighted Regulations: A methodology that relatively weights rules/regulations based on the risk and probability of morbidity or mortality if a violation was to occur.

Comprehensive Inspection[2]: A review of all rules/regulations to measure and document full compliance. Non-binary data between 1 and 100.

Key Indicators: A methodology that identifies the rules/regulations from comprehensive inspections[2] that statistically predict compliance with all rules/regulations.

Abbreviated Inspections: A review of a subset of rules/regulations used to determine partial compliance (other ex: complaint/incident investigations).

Focused Inspections: A review of high risk, key indicators and other randomly selected regulations used to determine substantial compliance.

Components of Differential Monitoring

- Weighted Regulations
- Key Indicators
- Focused Inspections

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Inspection Tools

- Comprehensive
  - Assessing compliance with *all regulations* to determine “Full Compliance”
- Abbreviated
  - Assessing compliance with a *subset of regulations* to determine “Partial Compliance”
- Focused
  - Assessing compliance with *high risk and key compliance indicator* regulations to determine “Substantial Compliance”

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Differential Monitoring Systems 2.0

1. Weight rules/regulations and define a scoring system using the Parker-Pritts[1] Compliance Scoring Model.
2. Establish a “comprehensive” inspection tool and begin gathering compliance scores.
3. Run “inspector bias” reports to identify Licensing Specialist who “don’t cite”, “under cite” or “over cite” regulations.
4. Do root cause analysis on potential inspector bias, and other data anomalies, and implement corrective action plans.
5. Begin gathering 1-year of “comprehensive” inspection data for the Key Indicators report and regularly check for “inspector bias”.

1. Key Compliance Indicator 2.0

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Differential Monitoring Systems 2.0 (continued)

6. With 1-year of “comprehensive” inspection scores, run Key Indicators report.
7. Define “Focused Inspection” tool with Eligibility Questions, High-Risk regulations, and Key Indicators.
8. Begin conducting Focused Inspections on “high” performing providers (approximately 10-15% of total providers).
9. Monitor results, including but not limited to “failed” focused inspections.
10. Perform ongoing modifications and adjustments to the Differential Monitoring System based on the data.

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Weighting Regulations

(using Relative Weighting)

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What is Relative Weighting?

A technique used to compare regulations, and assign point values, based on the risk and probability of morbidity or mortality, **if a violation was to occur**.

Morbidity
The condition of disease or medical condition.

Mortality
The state of being subject to death.

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Why Relative Weighting?

Allows agencies to assign point values to regulations using the Fibonacci Sequence, score inspections, and accurately identify “high” and “low” performing providers.

Providers	Regulation
Provider A	Parent Signatures
Providers B	Children Supervised

Violations	Likert Scale (1 to 8)	Fibonacci Sequence (1 to 100)
8	8 x -1 = -8	8 x -1 = -8
1	1 x -8 = -8	1 x -100 = -100

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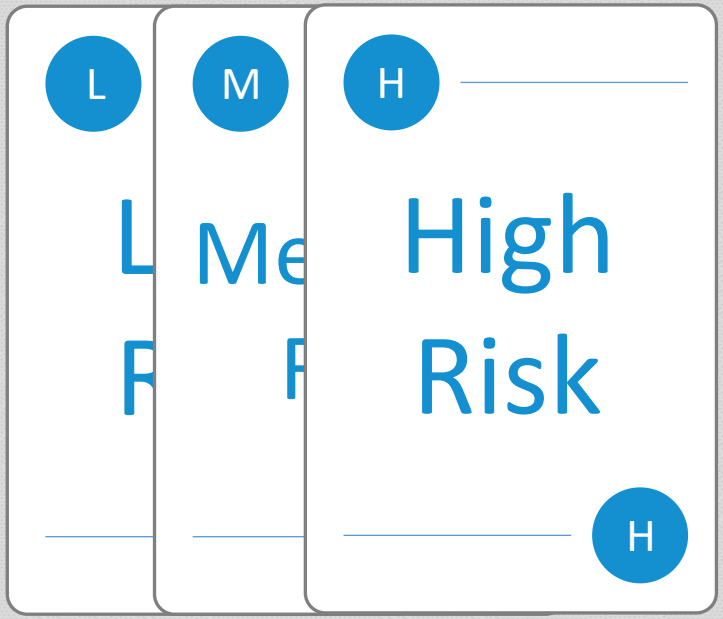
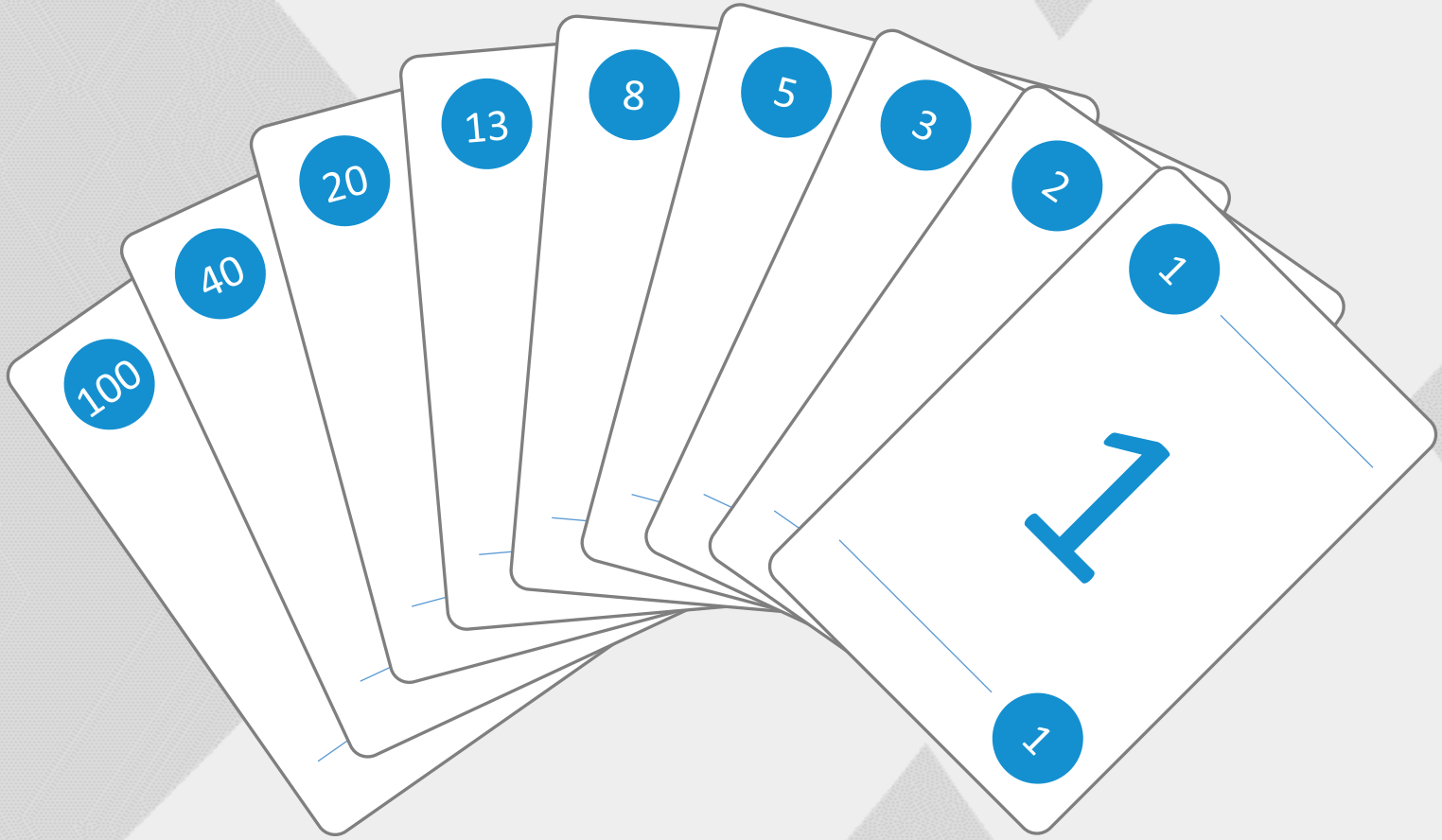
Relative Weighting Poker





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Key Indicators

(for Performance and Compliance)

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KPI – Inspector Bias

B Gra

Potentially “Under” Citing

Regulation	Compliance	Non-compliance	Percent Compliance	Over/Under Agency Average	Not Inspected	Not Applicable
22(E) Children's Records	53	0	100%	31%	0	0
22(F) Personnel Records	44	5	90%	21%	4	0
22(G) Personnel Handbook	7	0	100%	0%	46	0
23(A) Personnel and Staffing Requirements	26	0	100%	4%	27	0

A Bri

Potentially “Over” Citing

Regulation	Compliance	Non-compliance	Percent Compliance	Over/Inder Agency Average	Not Inspected	Not Applicable
22(E) Children's Records	8	15	35%	-34%	12	0
22(F) Personnel Records	11	23	32%	-37%	1	0
22(G) Personnel Handbook	1	0	100%	0%	34	5
23(A) Personnel and Staffing Requirements	33	1	97%	1%	1	0

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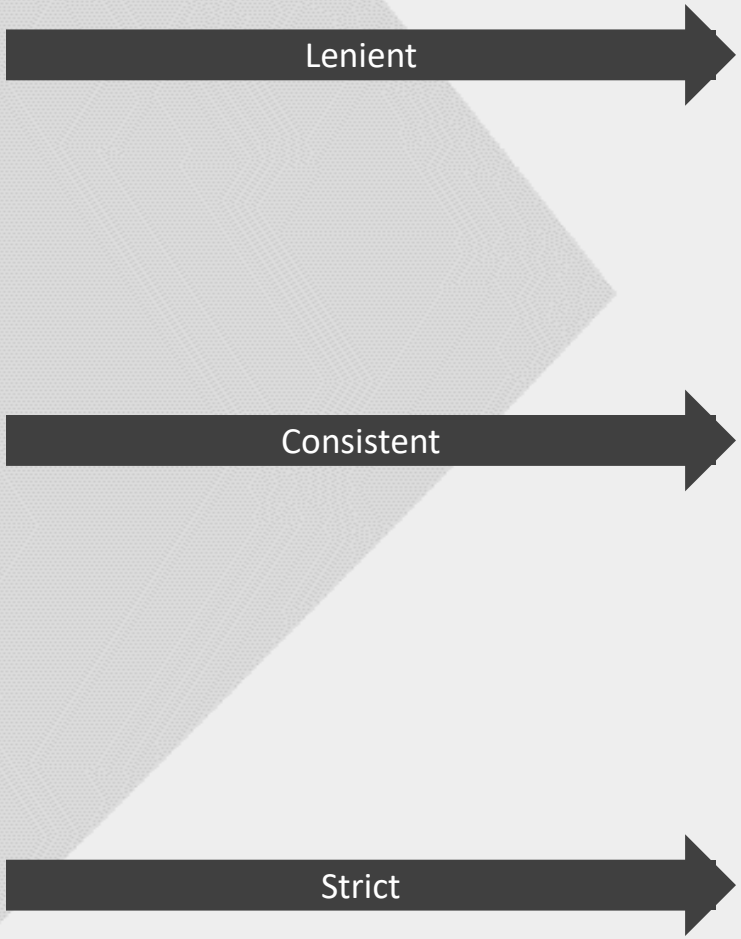
KPI - Consistency Scores

Baseline State

Licensing Staff	Score
D Ort	3.82
R Gon	2.06
J Mar	1.80
R Gar	1.54
M Bar	1.16
C Gle	0.72
L Lea	0.65
L Fer	0.27
J Rob	-0.47
S Per	-1.04
A Hol	-1.62
J Ram	-1.86
M Que	-2.44
A Rom	-3.64
Z Mol	-4.10
A Bri	-6.37

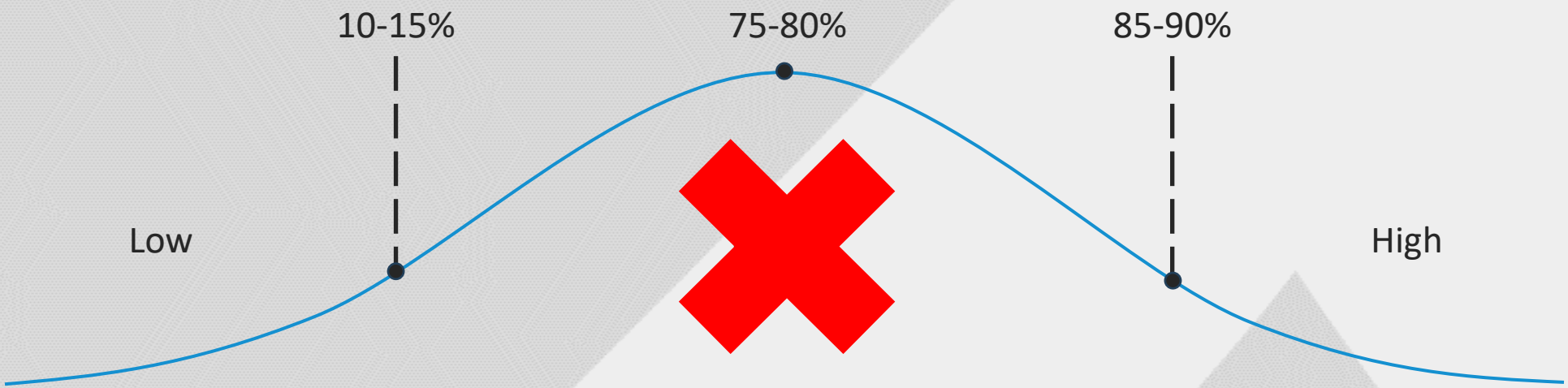


Target State

Licensing Staff	Score
M Bar	0.88
R Gar	0.74
C Gle	0.56
D Ort	0.33
J Rob	0.18
J Mar	0.09
L Fer	0.08
A Rom	0.03
L Lea	-0.01
R Gon	-0.05
S Per	-0.20
Z Mol	-0.35
A Bri	-0.37
A Hol	-0.48
M Que	-0.53
J Ram	-0.73

What is a Key Compliance Indicator?

A regulation that “high” performing providers are mostly compliant with, and “low” performing providers are mostly non-compliant with.



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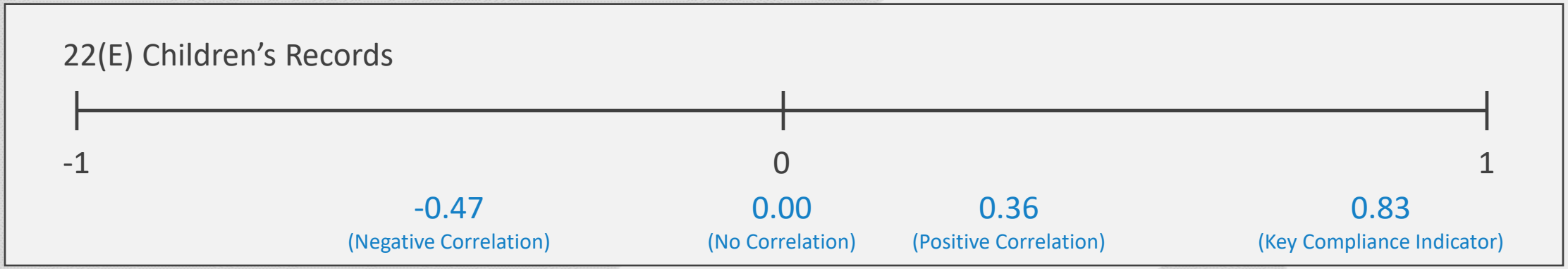
Key Compliance Indicator Process

1. Identify “high” and “low” performing providers using comprehensive inspection scores.
2. For both “high” and “low” performing providers, count the number of “compliances” and “non-compliances” for each regulation.
3. Calculate the Phi Coefficient for each regulation.



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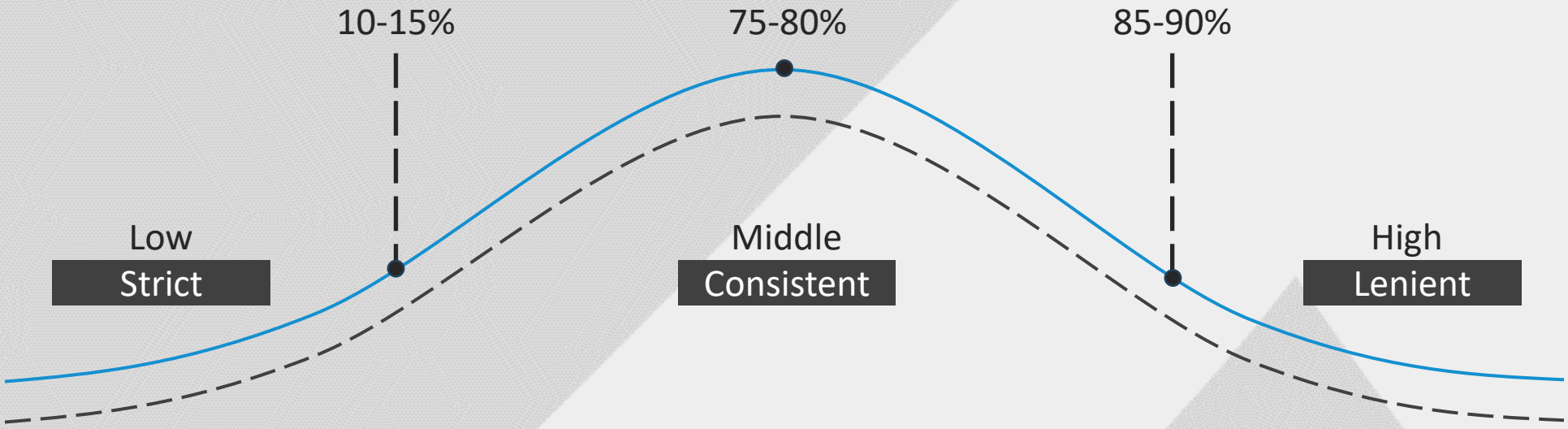
What can cause “false positives”?

1. Manually cleaning and organizing data to perform analysis.
2. Counting non-compliances to identify “high” and “low” performers.
3. Not checking for and addressing inspector bias and inconsistencies.



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Focused Inspection

(for “High” Performing Providers)

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Focused Inspection Overview

- High Group
  - Only intended for providers in the High Group (top 10-15%), and those that meet the Eligibility Criteria.
- Contents
  - Include 5-10 High Risk, 5-10 Key Indicator, and 5-10 randomly selected regulations.
- Focused to Comprehensive
  - If there are # (1, 2 or 3) non-compliances, the inspector must switch to a Comprehensive Inspection

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Getting Started

1. Comprehensive Inspection
   - “Uniform Monitoring” of all regulations.
2. Inter-rater Reliability
   - Check for bias and inconsistencies, train licensing staff, and repeat.
3. Weighted Regulations
   - Weight all regulations and build scoring system.

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Upcoming Workshops

1. Weighted Regulations In-depth
   - Relative Weighting and Scoring
2. Key Indicators In-depth
   - Inspector Bias/Consistency and Key Compliance Indicators
3. Focused Inspections In-depth
   - Comprehensive, Abbreviated and Focused Inspections

For questions about workshops or to register, please email:

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Thank you!

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