

# Regulatory Compliance (RC) and Program Quality (PQ) Data Distributions

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July 2019

This report will provide the data distributions for a series of regulatory compliance (RC) and program quality (PQ) studies which show dramatically different frequencies and centralized statistics. The regulatory compliance data distributions have some very important limitations that will be noted as well as some potential adjustments that can be made to the data sets to make statistical analyses more meaningful. These data distributions are from the USA and Canada.

***For purposes of reading the following Table 1, a Legend is provided:***

*Data Set = the study that the data are drawn from.*

*Sites = the number of sites in the particular study.*

*mean = the average of the scores.*

*sd = standard deviation.*

*p0 = the average score at the 0 percentile.*

*p25 = the average score at the 25th percentile.*

*p50 = the average score at the 50th percentile or the median.*

*p75 = the average score at the 75th percentile.*

*p100 = the average score at the 100th percentile.*

**Table 1**

<u>Data Set</u>	<u>Sites</u>	<u>mean</u>	<u>sd</u>	<u>p0</u>	<u>p25</u>	<u>p50</u>	<u>p75</u>	<u>p100</u>	<u>PQ or RC</u>
ECERS total score	209	4.24	0.94	1.86	3.52	4.27	4.98	6.29	PQ
FDCRS total score	163	3.97	0.86	1.71	3.36	4.03	4.62	5.54	PQ
ECERS and FDCRS totals	372	4.12	0.91	1.71	3.43	4.12	4.79	6.29	PQ
ECERS prek	48	4.15	0.74	2.56	3.6	4.15	4.65	5.56	PQ
ECERS preschool	102	3.42	0.86	1.86	2.82	3.26	4.02	5.97	PQ
ITERS	91	2.72	1.14	1.27	1.87	2.34	3.19	5.97	PQ
FDCRS	146	2.49	0.8	1.21	1.87	2.42	2.93	4.58	PQ
CCC RC	104	5.51	5.26	0	2	4	8	25	RC
FCC RC	147	5.85	5.71	0	2	4	8.5	33	RC
CCC RC	482	7.44	6.78	0	2	6	11	38	RC
FDC RC	500	3.52	4.05	0	0	2	5	34	RC
CI Total Violations	422	3.33	3.77	0	1	2	5	24	RC – PQ
CLASS ES	384	5.89	0.36	4.38	5.69	5.91	6.12	6.91	PQ
CLASS CO	384	5.45	0.49	3.07	5.18	5.48	5.77	6.56	PQ
CLASS IS	384	2.98	0.7	1.12	2.5	2.95	3.37	5.74	PQ
CLASS TOTAL OF THREE SCALES	384	14.33	1.32	8.87	13.52	14.33	15.11	17.99	PQ
ECERS Average	362	4.52	1.05	1.49	3.95	4.58	5.25	7	PQ
FDCRS Average	207	4.5	1	1.86	3.83	4.66	5.31	6.71	PQ
CCC RC	585	5.3	5.33	0	2	4	8	51	RC

QRIS	585	2.78	1.24	0	2	3	4	4	PQ
FDC RC	2486	2.27	3.42	0	0	1	3	34	RC
FDC PQ	2486	1.35	1.26	0	0	1	2	4	PQ
CCC RC	199	7.77	8.62	0	3	6	10	61	RC
CCC RC	199	6.69	10.32	0	1	4	8	98	RC
CCC RC	199	6.77	7.91	0	1.5	4	8.5	57	RC
QRIS	199	1.06	1.32	0	0	1	2	4	PQ
CCC RC	199	7.08	6.96	0	2.33	5.67	9.84	52	RC
QRIS	381	2.55	0.93	0	2	3	3	4	PQ
CCC RC	1399	1.13	2.1	0	0	0	1	20	RC
CCC RC	153	5.28	5.97	0	1	3	6	32	RC
FDC RC	82	3.52	4.36	0	0	2	4	21	RC

It is obvious when one observes the PQ as versus the RC data distributions that the RC data distributions are much more skewed, medians and means are significantly different, and kurtosis values are much higher which means that the data contain several outliers. These data distributions are provided for researchers who may be assessing regulatory compliance (RC) data for the first time. There are certain limitations of these data which are not present in more parametric data distributions which are more characteristic of program quality (PQ) data.

To deal with the level of skewness of RC data, weighted risk assessments have been suggested in order to introduce additional variance into the data distributions. Also, dichotomization of data has been used successfully with very skewed data distributions as well. One of the problems with very skewed data distributions is that it is very difficult to distinguish between high performing providers and mediocre performing providers. Skewed data distributions provide no limitations in distinguishing low performing providers from their more successful providers.