



TO: HCHS/SOL Quality Control Committee
CC:

FROM: Daniela Sotres-Alvarez, HCHS/SOL Coordinating Center
DATE: May 24, 2011

RE: HCHS/SOL Quality Control Report, May 2011

MEMORANDUM

Attached is the HCHS/SOL Quality Control Report produced during the month of May, 2011. We cut-off the inclusion of examination visit data used in this report on May 16th when the SAS analysis files were created. In particular we include the following tables and reports:

CC QC Report

Reliability Study

Table 3.2a Reliability of laboratory measurements (Tubes 1 & 2)

Table 3.2b Reliability of laboratory measurements (Tube 3)

Table 3.2c Reliability of laboratory measurements (Tube 4 & 5)

Table 3.2c Reliability of fasting glucose and insulin (Tube 4 & 5)

Table 3.2d Reliability of post OGTT glucose and insulin (Tube 10)

ALL HCHS/SOL Participants

Table 3.3 Average number of hours physical monitor was worn

Table 3.3c Adherence to wearing of physical activity monitor

Table 3.3.2 Average number of hours physical monitor was worn, by year of recruitment and number of times the device has been used

Table 3.5 ECG Quality Scores

Reading Center Reports

Audiometry

Spirometry

HCHS/SOL Quality Control Report, May 2011

Table 3.2a Reliability of laboratory measurements (Tubes 1 & 2)

		QC Pairs						Mean	Difference			
		N	Outliers removed	Mean	Lab SD (1)	Reliab (2)	CV (3)		95% CI	Prop > 0	pval (4)	
Total cholesterol (mg/dL) (LABA66)	Bronx	285	4	191.3	5.84	0.98	3.1	3.13	1.46	4.80	0.67	0.000
	Chicago	153	1	202.5	6.83	0.98	3.4	5.05	3.13	6.96	0.74	0.000
	Miami	200	3	205.0	5.66	0.98	2.8	0.72	-1.09	2.54	0.53	0.437
	San Diego	153	3	197.3	5.91	0.98	3.0	1.67	-0.23	3.58	0.63	0.000
	Overall	791	4	198.1	6.04	0.98	3.0	2.61	1.69	3.53	0.64	0.000
Triglycerides (mg/dL) (LABA67)	Bronx	286	3	116.4	5.56	0.99	4.8	5.83	1.85	9.81	0.72	0.000
	Chicago	153	1	152.9	5.90	1.00	3.9	3.42	-0.19	7.04	0.62	0.002
	Miami	198	5	138.2	4.67	1.00	3.4	1.01	-0.81	2.83	0.59	0.019
	San Diego	154	2	142.7	4.17	1.00	2.9	2.13	-0.14	4.39	0.63	0.000
	Overall	791	5	134.0	5.19	1.00	3.9	3.43	1.71	5.14	0.65	0.000
HDL-cholesterol (mg/dL) (LABA68)	Bronx	285	4	51.3	1.51	0.99	2.9	0.22	-0.11	0.56	0.62	0.006
	Chicago	153	1	47.5	1.56	0.98	3.3	1.06	0.31	1.81	0.64	0.002
	Miami	202	1	49.7	1.66	0.99	3.3	0.09	-0.49	0.68	0.45	0.291
	San Diego	153	3	49.0	1.53	0.98	3.1	0.10	-0.29	0.49	0.55	0.052
	Overall	793	4	49.7	1.56	0.99	3.1	0.33	0.08	0.58	0.56	0.001
LDL-cholesterol (mg/dL) (LABA69)	Bronx	280	4	115.6	4.02	0.98	3.5	1.34	0.46	2.23	0.64	0.000
	Chicago	145	1	124.8	5.29	0.97	4.2	3.83	2.29	5.37	0.74	0.000
	Miami	197	4	127.5	4.48	0.98	3.5	0.48	-1.06	2.03	0.53	0.393
	San Diego	149	3	119.6	4.84	0.98	4.0	1.01	-0.52	2.53	0.57	0.049
	Overall	771	4	121.1	4.58	0.98	3.8	1.52	0.86	2.18	0.62	0.000
Alanine aminotransferase (U/L) (LABA74)	Bronx	288	1	23.7	1.61	0.99	6.8	0.56	0.01	1.10	0.64	0.000
	Chicago	152	2	25.5	1.60	0.99	6.3	0.48	0.02	0.94	0.56	0.123
	Miami	201	2	26.4	1.70	0.99	6.5	0.49	-0.22	1.19	0.55	0.204
	San Diego	154	2	30.6	1.64	1.00	5.4	1.06	0.18	1.94	0.61	0.005
	Overall	795	2	26.0	1.64	0.99	6.3	0.62	0.29	0.95	0.60	0.000

		QC Pairs						Difference				
		N	Outliers removed	Mean	Lab SD (1)	Reliab (2)	CV (3)	Mean	95% CI	Prop > 0	pval (4)	
Aspartate aminotransferase (U/L) (LABA75)	Bronx	288	1	22.9	1.86	0.97	8.1	0.42	-0.30	1.14	0.52	0.860
	Chicago	153	2	23.5	2.08	0.95	8.8	0.59	0.04	1.14	0.63	0.002
	Miami	202	1	24.1	1.77	0.98	7.4	0.49	-0.12	1.09	0.53	0.439
	San Diego	154	2	25.8	1.56	0.98	6.0	0.19	-0.27	0.66	0.60	0.005
	Overall	797	2	23.9	1.84	0.98	7.7	0.43	0.10	0.76	0.56	0.001
Creatinine (mg/dL) (LABA76)	Bronx	288	1	0.9	0.05	0.99	5.9	-0.05	-0.10	-0.01	0.27	0.000
	Chicago	153	2	0.8	0.05	0.95	6.6	-0.01	-0.03	-0.00	0.42	0.106
	Miami	202	1	0.9	0.07	0.94	7.8	0.00	-0.01	0.02	0.51	0.833
	San Diego	155	1	0.8	0.05	0.96	6.5	0.00	-0.01	0.01	0.50	0.521
	Overall	798	2	0.8	0.06	0.97	6.7	-0.02	-0.04	-0.00	0.40	0.000
Iron (ug/dL) (LABA82)	Bronx	285	4	86.6	2.71	0.99	3.1	0.27	-0.36	0.91	0.61	0.004
	Chicago	154	1	90.1	3.51	0.99	3.9	2.24	1.29	3.19	0.70	0.000
	Miami	201	2	89.8	2.91	0.99	3.2	0.50	-0.21	1.21	0.51	0.672
	San Diego	154	2	89.9	2.58	0.99	2.9	0.96	-0.45	2.36	0.60	0.005
	Overall	794	4	88.7	2.93	0.99	3.3	0.84	0.40	1.28	0.60	0.000
Total Iron Bindind Capacity (TIBC) (ug/dL) (LABA83)	Bronx	285	4	319.5	9.46	0.96	3.0	2.65	0.94	4.36	0.65	0.000
	Chicago	154	0	338.1	12.61	0.94	3.7	6.94	4.03	9.84	0.70	0.000
	Miami	202	1	319.2	10.98	0.94	3.4	2.45	0.08	4.82	0.53	0.439
	San Diego	152	4	326.6	9.53	0.96	2.9	2.16	-0.30	4.62	0.52	0.466
	Overall	793	4	324.4	10.60	0.95	3.3	3.33	2.20	4.47	0.60	0.000
% Transferrin saturation (LABA84)	Bronx	284	5	27.8	0.66	1.00	2.4	-0.13	-0.34	0.07	0.43	0.138
	Chicago	153	1	27.7	0.78	1.00	2.8	-0.04	-0.30	0.22	0.42	0.747
	Miami	200	3	28.8	0.78	1.00	2.7	-0.10	-0.35	0.14	0.47	0.724
	San Diego	153	3	28.4	0.83	1.00	2.9	0.19	-0.33	0.71	0.49	0.258
	Overall	790	5	28.2	0.75	1.00	2.7	-0.04	-0.19	0.10	0.45	0.213
High-sensitivity C-Reactive Protein (mg/L) (LABA91)	Bronx	287	2	4.3	0.20	1.00	4.6	0.07	-0.00	0.15	0.60	0.003
	Chicago	151	3	2.7	0.10	1.00	3.7	0.07	0.04	0.11	0.66	0.000
	Miami	200	3	3.4	0.21	1.00	6.2	0.07	-0.06	0.19	0.59	0.028
	San Diego	151	5	3.7	0.13	1.00	3.5	-0.01	-0.07	0.06	0.57	0.034
	Overall	789	5	3.7	0.17	1.00	4.8	0.06	0.01	0.10	0.60	0.000

						Difference		
QC Pairs						Mean	95% CI	Prop > 0
N	Outliers removed	Mean	Lab SD (1)	Reliab (2)	CV (3)			pval (4)

Outliers (diff > 3 SD) excluded unless row label is preceded by *

(1) Standard deviation = square root (within-subject variance)

(2) The reliability coefficient is an estimate of the correlation between repeated measurements

(3) The coefficient of variation (CV) is the lab SD expressed as a percent of the mean of QC pairs

(4) P-value for test that the proportion of positive differences = 50% (test for systematic bias)

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Based on data retrieved at the CC on May 16, 2011

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Table 3.2b Reliability of laboratory measurements (Tube 3)

		QC Pairs		Lab SD (1)	Reliab (2)	CV (3)	Mean	Difference			pval (4)	
		N	Outliers removed					Mean	95% CI	Prop > 0		
White Blood Count (x10e9) (LABA1)	Bronx	286	8	6.5	0.43	0.96	6.6	-0.09	-0.19	0.00	0.42	0.008
	Chicago	187	3	6.4	0.24	0.98	3.8	0.03	-0.04	0.10	0.50	0.661
	Miami	217	3	6.5	0.50	0.93	7.6	-0.05	-0.17	0.08	0.43	0.077
	San Diego	179	5	6.7	0.26	0.97	3.9	-0.01	-0.09	0.07	0.40	0.232
	Overall	869	8	6.5	0.38	0.96	5.8	-0.04	-0.09	0.01	0.44	0.004
Red Blood Count (x10e12) (LABA2)	Bronx	312	4	4.7	0.07	0.97	1.5	-0.02	-0.03	0.00	0.47	0.282
	Chicago	210	2	4.7	0.09	0.95	2.0	-0.06	-0.08	-0.03	0.38	0.003
	Miami	229	4	4.8	0.08	0.97	1.6	-0.01	-0.03	0.01	0.48	0.692
	San Diego	190	1	4.7	0.09	0.95	1.9	-0.03	-0.06	-0.01	0.40	0.050
	Overall	941	4	4.7	0.08	0.96	1.7	-0.03	-0.04	-0.02	0.44	0.001
Hemoglobin (g/dL) (LABA3)	Bronx	311	5	13.6	0.23	0.98	1.7	-0.06	-0.11	-0.00	0.44	0.054
	Chicago	209	3	13.7	0.28	0.96	2.1	-0.19	-0.27	-0.11	0.36	0.002
	Miami	229	4	14.0	0.23	0.97	1.7	-0.04	-0.10	0.02	0.50	1.000
	San Diego	190	1	13.6	0.27	0.97	2.0	-0.10	-0.18	-0.01	0.37	0.035
	Overall	939	5	13.7	0.25	0.97	1.8	-0.09	-0.12	-0.06	0.42	0.000
% Hematocrit (LABA4)	Bronx	311	5	41.4	0.68	0.97	1.6	-0.18	-0.33	-0.03	0.44	0.041
	Chicago	210	2	41.9	0.93	0.95	2.2	-0.63	-0.88	-0.37	0.37	0.000
	Miami	230	3	42.8	0.79	0.95	1.8	-0.27	-0.45	-0.09	0.41	0.010
	San Diego	189	2	41.0	0.80	0.96	1.9	-0.36	-0.64	-0.08	0.39	0.041
	Overall	940	5	41.8	0.79	0.96	1.9	-0.34	-0.44	-0.23	0.41	0.000
Mean Corpuscular Volume (fl) (LABA5)	Bronx	310	6	88.2	0.58	0.99	0.7	-0.13	-0.31	0.06	0.38	0.020
	Chicago	211	1	89.5	0.52	0.99	0.6	-0.18	-0.29	-0.08	0.31	0.215
	Miami	228	5	90.2	0.65	0.99	0.7	-0.27	-0.46	-0.09	0.24	0.000
	San Diego	190	1	88.0	0.56	0.99	0.6	-0.20	-0.58	0.17	0.45	0.346
	Overall	939	6	88.9	0.58	0.99	0.6	-0.19	-0.30	-0.08	0.34	0.000

		QC Pairs		Mean	Lab SD (1)	Reliab (2)	CV (3)	Difference				
		N	Outliers removed					Mean	Mean	95% CI	Prop > 0	pval (4)
Mean Corpuscular Hemoglobin (pg) (LABA6)	Bronx	312	4	28.9	0.28	0.98	1.0	-0.03	-0.10	0.03	0.49	0.534
	Chicago	211	1	29.2	0.25	0.98	0.9	-0.07	-0.16	0.03	0.49	0.891
	Miami	231	2	29.4	0.28	0.98	0.9	0.01	-0.06	0.07	0.49	0.792
	San Diego	188	3	29.0	0.26	0.99	0.9	-0.02	-0.08	0.05	0.47	0.942
	Overall	942	4	29.1	0.27	0.98	0.9	-0.03	-0.06	0.01	0.48	0.625
Mean Corpuscular Hemoglobin Concentration (g/dL)(LABA7)	Bronx	313	3	32.8	0.34	0.93	1.0	0.01	-0.06	0.08	0.52	0.572
	Chicago	211	1	32.7	0.31	0.96	0.9	-0.00	-0.11	0.11	0.51	0.582
	Miami	231	2	32.7	0.37	0.94	1.1	0.11	0.04	0.19	0.60	0.004
	San Diego	190	1	33.0	0.36	0.93	1.1	0.04	-0.08	0.15	0.52	0.217
	Overall	945	3	32.8	0.35	0.94	1.1	0.04	-0.01	0.08	0.54	0.013
% Red Cell Distribution Width (LABA8)	Bronx	315	1	13.8	0.12	0.99	0.9	0.06	-0.04	0.15	0.48	0.430
	Chicago	210	2	13.6	0.08	1.00	0.6	0.00	-0.02	0.02	0.49	0.629
	Miami	229	4	13.6	0.09	0.99	0.7	-0.01	-0.04	0.01	0.46	0.509
	San Diego	190	1	13.5	0.09	1.00	0.7	-0.03	-0.08	0.03	0.50	0.217
	Overall	944	4	13.7	0.10	0.99	0.7	0.01	-0.02	0.04	0.48	0.580
Platelet Count (x10e9) (LABA9)	Bronx	313	3	250.7	11.44	0.97	4.6	1.46	-1.86	4.77	0.50	1.000
	Chicago	209	3	253.1	7.82	0.99	3.1	1.79	-0.79	4.37	0.53	0.407
	Miami	228	4	249.0	8.71	0.98	3.5	0.88	-1.74	3.49	0.44	0.098
	San Diego	188	3	258.7	9.35	0.98	3.6	-1.62	-4.54	1.29	0.49	1.000
	Overall	938	4	252.4	9.60	0.98	3.8	0.77	-0.74	2.29	0.49	0.719
% Neutrophils (LABA10)	Bronx	285	9	54.4	3.61	0.91	6.6	-0.34	-1.27	0.58	0.49	0.722
	Chicago	181	9	56.6	1.43	0.98	2.5	0.11	-0.53	0.75	0.60	0.007
	Miami	213	7	51.8	5.56	0.80	10.7	0.36	-1.06	1.79	0.54	0.273
	San Diego	179	5	57.2	1.85	0.96	3.2	0.35	-0.41	1.12	0.53	0.135
	Overall	858	9	54.8	3.57	0.90	6.5	0.07	-0.44	0.59	0.53	0.037
% Lymphocytes (LABA11)	Bronx	283	11	33.5	2.71	0.92	8.1	0.37	-0.48	1.22	0.55	0.342
	Chicago	180	10	32.2	1.14	0.98	3.5	0.42	-0.01	0.85	0.54	0.205
	Miami	212	8	34.9	4.61	0.77	13.2	0.10	-1.16	1.35	0.49	0.945
	San Diego	179	5	32.5	1.69	0.96	5.2	-0.13	-0.76	0.50	0.53	0.135
	Overall	854	11	33.4	2.89	0.90	8.6	0.21	-0.24	0.66	0.53	0.094

		QC Pairs		Mean	Lab SD (1)	Reliab (2)	CV (3)	Difference				
		N	Outliers removed					Mean	95% CI	Prop > 0	pval (4)	
												Mean	95% CI	Prop > 0	pval (4)
% Monocytes (LABA12)	Bronx	287	7	8.3	1.26	0.78	15.2	-0.05	-0.33	0.22	0.43	0.045
	Chicago	187	3	7.4	0.94	0.81	12.7	-0.39	-0.65	-0.13	0.32	0.028
	Miami	213	7	8.6	1.08	0.83	12.5	-0.45	-0.72	-0.18	0.33	0.001
	San Diego	180	4	7.4	0.78	0.83	10.5	-0.22	-0.43	-0.01	0.38	0.709
	Overall	867	7	8.0	1.06	0.81	13.2	-0.26	-0.39	-0.12	0.37	0.000
% Eosiniphils (LABA13)	Bronx	284	9	2.8	0.56	0.95	19.9	0.01	-0.13	0.15	0.50	0.678
	Chicago	189	1	3.2	0.39	0.98	12.5	-0.00	-0.11	0.11	0.45	0.663
	Miami	214	6	3.6	0.74	0.96	20.1	-0.04	-0.25	0.16	0.52	0.733
	San Diego	181	3	2.4	0.46	0.93	18.9	-0.02	-0.13	0.09	0.47	0.181
	Overall	868	9	3.0	0.55	0.96	18.4	-0.01	-0.09	0.06	0.49	1.000
% Basophils (LABA14)	Bronx	280	9	0.5	0.34	0.58	69.8	0.02	-0.05	0.10	0.53	0.765
	Chicago	190	0	0.5	0.30	0.66	54.9	-0.05	-0.11	0.02	0.41	0.717
	Miami	214	3	0.7	0.47	0.38	70.0	-0.08	-0.18	0.02	0.45	0.733
	San Diego	182	0	0.4	0.40	0.43	93.5	0.03	-0.06	0.11	0.54	0.045
	Overall	866	9	0.5	0.38	0.53	71.0	-0.02	-0.06	0.02	0.49	0.919
Neutrophil Count (x10e9)(LABA23)	Bronx	283	10	3.6	0.40	0.94	11.0	-0.07	-0.17	0.02	0.44	0.057
	Chicago	188	2	3.7	0.20	0.98	5.4	0.01	-0.05	0.07	0.49	0.827
	Miami	216	3	3.5	0.55	0.87	15.9	-0.03	-0.14	0.08	0.48	0.734
	San Diego	179	5	3.9	0.23	0.97	5.8	0.01	-0.06	0.09	0.43	0.765
	Overall	866	10	3.6	0.38	0.94	10.3	-0.03	-0.07	0.02	0.46	0.144
Lymphocyte Count (x10e9) (LABA24)	Bronx	286	7	2.1	0.18	0.92	8.7	-0.00	-0.04	0.04	0.40	0.005
	Chicago	186	4	2.0	0.13	0.94	6.2	0.03	-0.01	0.07	0.55	0.123
	Miami	215	5	2.2	0.27	0.83	12.4	-0.01	-0.08	0.05	0.42	0.101
	San Diego	179	5	2.1	0.11	0.97	5.2	-0.01	-0.04	0.02	0.46	0.765
	Overall	866	7	2.1	0.19	0.91	8.8	-0.00	-0.02	0.02	0.45	0.110
Monocyte Count (x10e9) (LABA25)	Bronx	288	5	0.5	0.08	0.84	14.8	-0.01	-0.03	0.00	0.36	0.001
	Chicago	187	3	0.5	0.07	0.80	14.2	-0.02	-0.03	0.00	0.39	0.465
	Miami	216	4	0.6	0.08	0.83	14.9	-0.04	-0.06	-0.02	0.28	0.000
	San Diego	180	4	0.5	0.05	0.87	11.0	-0.02	-0.03	-0.00	0.37	1.000
	Overall	871	5	0.5	0.07	0.84	14.1	-0.02	-0.03	-0.01	0.34	0.000

		QC Pairs						Difference				
		N	Outliers removed	Mean	Lab SD (1)	Reliab (2)	CV (3)	Mean	95% CI	Prop > 0	pval (4)	
Eosinophil Count (x10e9) (LABA26)	Bronx	285	7	0.2	0.04	0.95	21.1	-0.00	-0.01	0.00	0.41	0.192
	Chicago	187	3	0.2	0.03	0.98	15.4	-0.01	-0.01	0.00	0.30	0.884
	Miami	215	5	0.2	0.04	0.97	18.1	-0.00	-0.01	0.01	0.41	0.682
	San Diego	183	1	0.2	0.03	0.93	20.5	0.00	-0.01	0.01	0.51	0.076
	Overall	870	7	0.2	0.04	0.97	18.8	-0.00	-0.01	0.00	0.41	0.235
Basophil Count (x10e9) (LABA27)	Bronx	284	4	0.0	0.03	0.59	133.9	0.00	-0.01	0.01	0.54	0.678
	Chicago	182	8	0.0	0.02	0.81	86.4	0.00	-0.00	0.01	1.00	0.045
	Miami	212	5	0.0	0.03	0.46	117.4	-0.00	-0.01	0.00	0.48	1.000
	San Diego	182	0	0.0	0.03	0.58	134.4	0.00	-0.00	0.01	0.58	0.031
	Overall	860	8	0.0	0.03	0.60	120.8	0.00	-0.00	0.00	0.57	0.433
% Glycosylated Hemoglobin (LABA72)	Bronx	313	6	5.9	0.06	1.00	1.0	0.00	-0.04	0.05	0.39	0.054
	Chicago	211	3	5.6	0.04	1.00	0.7	0.01	-0.01	0.02	0.47	0.491
	Miami	231	4	5.8	0.05	1.00	0.8	-0.01	-0.03	0.02	0.54	0.599
	San Diego	184	5	5.8	0.04	1.00	0.6	-0.01	-0.01	0.00	0.51	0.090
	Overall	939	6	5.8	0.05	1.00	0.8	0.00	-0.02	0.02	0.46	0.602

Outliers (diff > 3 SD) excluded unless row label is preceded by *

(1) Standard deviation = square root (within-subject variance)

(2) The reliability coefficient is an estimate of the correlation between repeated measurements

(3) The coefficient of variation (CV) is the lab SD expressed as a percent of the mean of QC pairs

(4) P-value for test that the proportion of positive differences = 50% (test for systematic bias)

Created by HC038002b (AGH) on 23MAY11 14:18
Based on data retrieved at the CC on May 16, 2011

HCHS/SOL Quality Control Report, May 2011

Table 3.2c Reliability of laboratory measurements (Tube 4 & 5)

		QC Pairs					Difference					
		N	Outliers removed	Mean	Lab SD (1)	Reliab (2)	CV (3)	Mean	95% CI	Prop > 0	pval (4)	
Glucose, fasting (mg/dL) (LABA70)	Bronx	281	4	103.6	2.57	0.99	2.5	-1.21	-1.93	-0.50	0.33	0.000
	Chicago	149	3	110.5	3.09	0.99	2.8	-0.33	-1.61	0.96	0.39	0.071
	Miami	199	4	103.2	3.28	0.99	3.2	-1.30	-2.47	-0.13	0.25	0.000
	San Diego	154	3	104.4	2.75	0.99	2.6	-0.08	-0.81	0.65	0.45	0.687
	Overall	783	4	105.0	2.91	0.99	2.8	-0.84	-1.33	-0.36	0.34	0.000
Insulin, fasting (converted to mU/L)	Bronx	266	5	12.5	1.34	0.97	10.7	-0.14	-0.65	0.37	0.48	0.425
	Chicago	138	7	13.0	1.28	0.98	9.8	0.04	-0.41	0.50	0.51	0.444
	Miami	189	2	15.3	1.78	0.97	11.7	0.20	-0.27	0.68	0.51	0.771
	San Diego	149	4	13.4	1.75	0.98	13.1	0.74	0.15	1.32	0.58	0.021
	Overall	742	7	13.5	1.53	0.98	11.4	0.16	-0.11	0.42	0.51	0.322

Outliers (diff > 3 SD) excluded unless row label is preceded by *

(1) Standard deviation = square root (within-subject variance)

(2) The reliability coefficient is an estimate of the correlation between repeated measurements

(3) The coefficient of variation (CV) is the lab SD expressed as a percent of the mean of QC pairs

(4) P-value for test that the proportion of positive differences = 50% (test for systematic bias)

Created by HC038002c (AGH) on 23MAY11 14:18

Based on data retrieved at the CC on May 16, 2011

HCHS/SOL Quality Control Report, May 2011

Table 3.2d Reliability of laboratory measurements (Tube 10)

		QC Pairs		Mean	Lab SD (1)	Reliab (2)	CV (3)	Difference			pval (4)	
	N	Outliers removed	Mean					Mean	95% CI	Prop > 0		
Glucose, post OGTT (mg/dL) (LABA71)	Bronx	317	4	124.3	3.00	1.00	2.4	0.11	-0.49	0.71	0.51	0.911
	Chicago	204	6	117.4	3.69	0.99	3.1	-1.20	-2.95	0.56	0.44	0.294
	Miami	229	3	126.8	3.93	0.99	3.1	0.09	-1.50	1.69	0.50	0.895
	San Diego	184	4	117.3	4.38	0.99	3.7	-3.38	-7.45	0.70	0.58	0.015
	Overall	934	6	122.0	3.69	0.99	3.0	-0.87	-1.87	0.13	0.51	0.452
Insulin, post OGTT (converted to mU/L)	Bronx	303	7	88.5	4.64	1.00	5.2	0.42	-0.59	1.43	0.52	0.909
	Chicago	199	5	85.8	6.68	0.99	7.8	-1.82	-5.98	2.33	0.44	0.202
	Miami	218	3	91.9	10.04	0.99	10.9	-1.44	-5.04	2.16	0.49	0.946
	San Diego	181	5	83.1	6.74	0.99	8.1	-3.43	-6.14	-0.72	0.43	0.552
	Overall	901	7	87.6	7.10	0.99	8.1	-1.30	-2.72	0.12	0.48	0.351

Outliers (diff > 3 SD) excluded unless row label is preceded by *

(1) Standard deviation = square root (within-subject variance)

(2) The reliability coefficient is an estimate of the correlation between repeated measurements

(3) The coefficient of variation (CV) is the lab SD expressed as a percent of the mean of QC pairs

(4) P-value for test that the proportion of positive differences = 50% (test for systematic bias)

Created by HC038002d (AGH) on 23MAY11 14:18

Based on data retrieved at the CC on May 16, 2011

HCHS/SOL Quality Control Report, May 2011

Table 3.3 Average number of hours physical monitor was worn

		<u>Bronx</u> (N=2995)			<u>Chicago</u> (N=3038)			<u>Miami</u> (N=2949)			<u>San Diego</u> (N=3286)			<u>Overall</u> (N=12268)		
		N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
<i>Daily hours of monitoring</i>	<i>Mar 08-Feb 09</i>	601	8.8	4.64	622	7.9	3.64	477	8.0	3.57	770	7.3	3.34	2470	7.9	3.85
	<i>Mar 09-Feb 10</i>	1105	7.1	4.91	1421	7.4	3.93	1182	7.5	3.45	1383	7.2	3.61	5091	7.3	3.98
	<i>Mar 10-Feb 11</i>	1167	5.3	4.56	751	5.9	4.99	1142	7.3	3.55	1028	6.6	3.92	4088	6.3	4.30
	<i>Mar 11-Present</i>	102	7.7	4.95	232	5.0	4.40	146	7.0	3.74	105	9.3	3.29	585	6.7	4.44
	<i>Overall</i>	2995	6.8	4.90	3038	7.0	4.29	2949	7.5	3.53	3286	7.1	3.68	12268	7.1	4.13
<i>Days adherent</i>	<i>Mar 08-Feb 09</i>	601	4.3	2.33	622	4.1	2.15	477	4.2	2.20	770	3.8	2.11	2470	4.1	2.20
	<i>Mar 09-Feb 10</i>	1105	3.5	2.46	1421	4.4	2.32	1182	3.8	2.19	1383	3.8	2.29	5091	3.9	2.34
	<i>Mar 10-Feb 11</i>	1167	2.6	2.28	751	3.0	2.55	1142	3.7	2.18	1028	3.5	2.39	4088	3.2	2.38
	<i>Mar 11-Present</i>	102	3.8	2.55	232	2.6	2.38	146	3.7	2.23	105	5.0	1.98	585	3.5	2.46
	<i>Overall</i>	2995	3.3	2.45	3038	3.8	2.43	2949	3.8	2.20	3286	3.8	2.29	12268	3.7	2.35

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Based on data retrieved at the CC on May 16, 2011

HCHS/SOL Quality Control Report, May 2011

Table 3.3c Adherence to wearing of physical activity monitor

	<i>Bronx</i> <i>(N=2995)</i>		<i>Chicago</i> <i>(N=3038)</i>		<i>Miami</i> <i>(N=2949)</i>		<i>San Diego</i> <i>(N=3286)</i>		<i>Overall</i> <i>(N=12268)</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
<i>Less than 1 day with 8 hrs of PA data</i>										
<i>Mar 08-Feb 09</i>	50	8.3	56	9.0	40	8.4	83	10.8	229	9.3
<i>Mar 09-Feb 10</i>	137	12.4	134	9.4	123	10.4	171	12.4	565	11.1
<i>Mar 10-Feb 11</i>	220	18.9	194	25.8	111	9.7	183	17.8	708	17.3
<i>Mar 11-Present</i>	12	9.8	64	26.2	17	11.5	4	3.8	97	15.7
<i>Overall</i>	419	14.0	448	14.8	291	9.9	441	13.4	1599	13.0
<i>1-3 days with 8 hrs of PA data</i>										
<i>Mar 08-Feb 09</i>	163	27.1	161	25.9	133	27.9	218	28.3	675	27.3
<i>Mar 09-Feb 10</i>	445	40.3	312	22.0	370	31.3	398	28.8	1525	30.0
<i>Mar 10-Feb 11</i>	580	49.7	227	30.2	387	33.9	305	29.7	1499	36.7
<i>Mar 11-Present</i>	41	33.6	88	36.1	50	33.8	20	19.1	199	32.2
<i>Overall</i>	1229	41.0	788	25.9	940	31.9	941	28.6	3898	31.8
<i>4 or more days with 8 hrs of PA data</i>										
<i>Mar 08-Feb 09</i>	388	64.6	405	65.1	304	63.7	469	60.9	1566	63.4
<i>Mar 09-Feb 10</i>	523	47.3	975	68.6	689	58.3	814	58.9	3001	59.0
<i>Mar 10-Feb 11</i>	367	31.5	330	43.9	644	56.4	540	52.5	1881	46.0
<i>Mar 11-Present</i>	69	56.6	92	37.7	81	54.7	81	77.1	323	52.2
<i>Overall</i>	1347	45.0	1802	59.3	1718	58.3	1904	57.9	6771	55.2

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Based on data retrieved at the CC on May 16, 2011

HCHS/SOL Quality Control Report, May 2011

**Table 3.3.2 Average number of hours physical monitor was worn, by number of times the device has been used
Subset on subjects who used monitor for 7 days**

			<i>Bronx</i> <i>(N=2924)</i>			<i>Chicago</i> <i>(N=2661)</i>			<i>Miami</i> <i>(N=2912)</i>			<i>San Diego</i> <i>(N=3206)</i>			<i>Overall</i> <i>(N=11703)</i>		
			<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>
<i>Days adherent</i>	<i>Mar 08-Feb 09</i>	<i>1-5</i>	42	4.7	2.15	53	4.5	2.05	188	4.4	2.11	34	4.3	2.00	317	4.5	2.09
		<i>6-10</i>	193	4.4	2.32	196	3.9	2.22	93	3.9	2.31	47	3.8	2.10	529	4.1	2.27
		<i>11-15</i>	97	4.5	2.33	229	4.1	2.08	59	3.6	2.24	59	3.5	2.09	444	4.1	2.18
		<i>16-20</i>	86	4.5	2.20	57	3.9	1.95	80	4.3	2.09	196	3.8	2.10	419	4.1	2.12
		<i>21-25</i>	63	4.2	2.34	46	4.0	2.33	39	3.8	2.30	264	3.9	2.16	412	3.9	2.22
		<i>26-30</i>	81	4.0	2.42	14	4.5	1.65	-	-	-	134	3.8	2.01	229	3.9	2.15
		<i>31-35</i>	16	3.0	2.07	-	-	-	8	4.4	2.50	19	3.8	2.17	43	3.6	2.20
	<i>Mar 09-Feb 10</i>	<i>1-5</i>	85	4.6	2.24	112	4.2	1.96	15	3.5	2.10	3	5.0	1.73	215	4.3	2.09
		<i>6-10</i>	158	4.0	2.54	291	4.3	2.12	79	4.3	2.17	99	3.5	2.28	627	4.1	2.28
		<i>11-15</i>	114	3.5	2.41	393	4.1	2.23	195	3.8	2.18	238	4.1	2.22	940	4.0	2.25
		<i>16-20</i>	165	3.8	2.45	188	4.2	2.22	456	3.8	2.20	522	3.8	2.27	1331	3.9	2.26
		<i>21-25</i>	240	3.3	2.49	98	4.2	2.33	383	3.8	2.19	375	3.7	2.31	1096	3.7	2.32
		<i>26-30</i>	233	3.0	2.34	14	3.6	2.24	13	3.9	1.80	106	3.8	2.53	366	3.3	2.40
		<i>31-35</i>	87	2.7	2.27	-	-	-	24	3.5	2.21	18	3.6	2.20	129	3.0	2.27
	<i>Mar 10-present</i>	<i>1-5</i>	42	3.8	2.49	1	2.0	-	172	4.2	2.12	34	4.4	2.22	249	4.1	2.20
		<i>6-10</i>	177	3.2	2.52	91	3.7	2.65	77	4.4	2.05	11	4.1	2.43	356	3.6	2.49
		<i>11-15</i>	212	3.0	2.27	345	3.1	2.53	138	3.8	2.19	79	3.6	2.43	774	3.2	2.41
		<i>16-20</i>	203	2.7	2.31	201	2.8	2.51	330	3.7	2.20	309	3.3	2.30	1043	3.2	2.35
		<i>21-25</i>	184	2.4	2.27	85	2.6	2.41	377	3.5	2.12	398	3.6	2.42	1044	3.3	2.33
		<i>26-30</i>	233	2.0	1.98	12	2.8	2.63	11	2.2	2.09	134	3.1	2.44	390	2.4	2.23
		<i>31-35</i>	92	1.8	1.56	-	-	-	27	3.3	2.60	24	3.4	2.04	143	2.4	2.00

<i>Daily hours of monitoring</i>	<i>Mar 08-Feb 09</i>	<i>1-5</i>	42	9.3	3.56	53	9.0	4.03	188	8.4	3.42	34	7.7	3.20	317	8.6	3.54
		<i>6-10</i>	193	9.1	4.80	196	7.7	3.70	93	7.9	3.95	47	7.4	3.37	529	8.2	4.20
		<i>11-15</i>	97	9.5	4.65	229	7.9	3.55	59	7.4	3.30	59	7.2	3.15	444	8.1	3.81
		<i>16-20</i>	86	9.2	4.26	57	8.1	3.28	80	8.2	3.14	196	7.4	3.38	419	8.0	3.58
		<i>21-25</i>	63	8.9	5.03	46	8.2	3.92	39	7.4	3.94	264	7.4	3.37	412	7.7	3.82
		<i>26-30</i>	81	8.0	4.51	14	8.2	2.84	-	-	-	134	7.5	3.27	229	7.7	3.73
		<i>31-35</i>	16	6.7	3.66	-	-	-	8	8.8	4.08	19	7.2	3.70	43	7.3	3.74
	<i>Mar 09-Feb 10</i>	<i>1-5</i>	85	9.2	4.14	112	8.2	3.28	15	8.2	3.74	3	9.8	1.91	215	8.6	3.68
		<i>6-10</i>	158	8.0	4.74	291	8.1	3.76	79	8.2	3.37	99	7.0	3.39	627	7.9	3.94
		<i>11-15</i>	114	7.1	4.63	393	8.1	4.14	195	7.4	3.32	238	7.6	3.43	940	7.7	3.89
		<i>16-20</i>	165	8.0	5.14	188	8.3	3.95	456	7.5	3.39	522	7.3	3.58	1331	7.6	3.81
		<i>21-25</i>	240	6.9	5.21	98	8.1	4.43	383	7.5	3.56	375	7.1	3.74	1096	7.3	4.12
		<i>26-30</i>	233	6.2	4.71	14	7.0	4.07	13	7.5	2.73	106	7.4	3.99	366	6.6	4.45
		<i>31-35</i>	87	5.5	4.31	-	-	-	24	6.9	3.27	18	6.5	3.38	129	5.9	4.04
	<i>Mar 10-present</i>	<i>1-5</i>	42	7.7	4.71	1	6.2	-	172	8.4	3.42	34	8.9	3.59	249	8.4	3.68
		<i>6-10</i>	177	6.4	4.73	91	7.2	5.09	77	9.0	3.61	11	8.1	2.87	356	7.2	4.66
		<i>11-15</i>	212	6.0	4.59	345	6.3	5.11	138	7.3	3.52	79	6.8	4.01	774	6.4	4.63
		<i>16-20</i>	203	5.4	4.67	201	5.4	4.79	330	7.2	3.46	309	6.3	3.82	1043	6.2	4.16
		<i>21-25</i>	184	5.2	4.92	85	5.2	4.86	377	6.7	3.38	398	6.9	3.96	1044	6.4	4.09
		<i>26-30</i>	233	4.1	3.98	12	5.2	4.84	11	4.6	3.47	134	6.2	4.10	390	4.9	4.13
		<i>31-35</i>	92	3.8	3.18	-	-	-	27	6.6	4.22	24	6.0	3.28	143	4.7	3.60

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Table 3.5 ECG Quality Scores

	<i>Bronx</i> <i>(N=3800)</i>		<i>Chicago</i> <i>(N=3706)</i>		<i>Miami</i> <i>(N=3727)</i>		<i>San Diego</i> <i>(N=3837)</i>		<i>Overall</i> <i>(N=15070)</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
<i>Grade 0 (good)</i>	3688	97.05	3631	97.98	3674	98.58	3716	96.85	14709	97.60
<i>Grade 1</i>	41	1.08	19	0.51	21	0.56	77	2.01	158	1.05
<i>Grade 2</i>	27	0.71	30	0.81	11	0.30	11	0.29	79	0.52
<i>Grade 5 (unusable)</i>	44	1.16	26	0.70	21	0.56	32	0.83	123	0.82

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Based on data retrieved at the CC on May 16, 2011

*Monthly EAR Center QA Report by Site
Examinations Conducted 10-16-2010 through 4-14-2011
Report may not contain all records in this time period*

Error Status	Site				
	BRONX N=146	CHICAGO N=206	MIAMI N=169	SAN DIEGO N=131	TOTAL N=652
	%	%	%	%	%
Error-Free Overall	53.4	55.3	64.5	80.9	62.4
Error-Free Audiometry	79.5	77.2	86.4	87.8	82.2
1000 Hz Test-ReTest Acceptable	99.3	99.5	98.8	98.5	99.1
Correct Transducer Used	99.3	98.1	98.2	97.7	98.3
Possible Placement Problems	.	.	.	.	.
. 500 Hz	19.3	17.0	8.4	28.2	17.6
. 2000 Hz	6.9	10.3	4.2	14.5	8.8
. 4000 Hz	0.0	0.0	0.0	0.0	0.0
AC Masking	.	.	.	.	.
. Correct	95.2	92.2	93.4	94.7	93.7
. Missed	4.1	6.8	5.4	0.8	4.6
. Excess Testing	0.0	0.0	0.6	0.8	0.3
. Incorrect Methods	0.7	1.0	0.6	3.8	1.4
. Cannot Determine	0.0	0.0	0.0	0.0	0.0
BC Masking	.	.	.	.	.
. Correct	82.2	83.5	91.6	93.1	87.2
. Missed	2.1	1.9	0.6	0.0	1.2
. Excess Testing	0.0	4.9	0.0	1.5	1.8
. Incorrect Methods	13.7	9.7	7.2	5.3	9.1
. Cannot Determine	2.1	0.0	0.6	0.0	0.6
Tymp Data Entry	.	.	.	.	.
. Correct	95.2	79.1	90.5	96.2	89.1
. Unknown	1.4	0.5	2.4	0.0	1.1
. Other	3.4	20.4	7.1	3.8	9.8
Tymp Repeats	.	.	.	.	.
. Correct	74.7	88.8	80.5	93.9	84.5
. Missed Repeat	8.2	2.9	11.2	2.3	6.1
. Excess Testing	17.1	7.8	6.5	3.8	8.7
. Cannot Determine	0.0	0.5	1.8	0.0	0.6
No Reportable Tymps	8.9	5.3	23.1	1.5	10.0

*Monthly EAR Center QA Report by Site and Examiner
Examinations Conducted 10-16-2010 through 4-14-2011
Report may not contain all records in this time period*

Site=BRONX

Error Status	Audiometric Examiner		
	108 N=83	110 N=63	TOTAL N=146
	%	%	%
Error-Free Overall	49.4	58.7	53.4
Error-Free Audiometry	74.7	85.7	79.5
1000 Hz Test-ReTest Acceptable	100.0	98.4	99.3
Correct Transducer Used	98.8	100.0	99.3
Possible Placement Problems	.	.	.
. 500 Hz	25.6	11.1	19.3
. 2000 Hz	11.0	1.6	6.9
. 4000 Hz	0.0	0.0	0.0
AC Masking	.	.	.
. Correct	94.0	96.8	95.2
. Missed	4.8	3.2	4.1
. Excess Testing	0.0	0.0	0.0
. Incorrect Methods	1.2	0.0	0.7
. Cannot Determine	0.0	0.0	0.0
BC Masking	.	.	.
. Correct	77.1	88.9	82.2
. Missed	1.2	3.2	2.1
. Excess Testing	0.0	0.0	0.0
. Incorrect Methods	19.3	6.3	13.7
. Cannot Determine	2.4	1.6	2.1
Tymp Data Entry	.	.	.
. Correct	96.4	93.7	95.2
. Unknown	1.2	1.6	1.4
. Other	2.4	4.8	3.4
Tymp Repeats	.	.	.
. Correct	72.3	77.8	74.7
. Missed Repeat	10.8	4.8	8.2
. Excess Testing	16.9	17.5	17.1
. Cannot Determine	0.0	0.0	0.0
No Reportable Tymps	9.6	7.9	8.9

*Monthly EAR Center QA Report by Site and Examiner
Examinations Conducted 10-16-2010 through 4-14-2011
Report may not contain all records in this time period*

Site=CHICAGO

Error Status	Audiometric Examiner				
	209 N=34	277 N=64	298 N=30	633 N=78	TOTAL N=206
	%	%	%	%	%
Error-Free Overall	88.2	46.9	53.3	48.7	55.3
Error-Free Audiometry	91.2	84.4	63.3	70.5	77.2
1000 Hz Test-ReTest Acceptable	100.0	100.0	100.0	98.7	99.5
Correct Transducer Used	100.0	100.0	96.7	96.2	98.1
Possible Placement Problems	.	.	.	.	.
. 500 Hz	20.6	28.1	3.3	11.5	17.0
. 2000 Hz	14.7	12.5	0.0	10.4	10.3
. 4000 Hz	0.0	0.0	0.0	0.0	0.0
AC Masking	.	.	.	.	.
. Correct	100.0	92.2	83.3	92.3	92.2
. Missed	0.0	6.3	13.3	7.7	6.8
. Excess Testing	0.0	0.0	0.0	0.0	0.0
. Incorrect Methods	0.0	1.6	3.3	0.0	1.0
. Cannot Determine	0.0	0.0	0.0	0.0	0.0
BC Masking	.	.	.	.	.
. Correct	91.2	84.4	76.7	82.1	83.5
. Missed	2.9	3.1	3.3	0.0	1.9
. Excess Testing	0.0	0.0	3.3	11.5	4.9
. Incorrect Methods	5.9	12.5	16.7	6.4	9.7
. Cannot Determine	0.0	0.0	0.0	0.0	0.0
Tymp Data Entry	.	.	.	.	.
. Correct	97.1	56.3	83.3	88.5	79.1
. Unknown	2.9	0.0	0.0	0.0	0.5
. Other	0.0	43.8	16.7	11.5	20.4
Tymp Repeats	.	.	.	.	.
. Correct	97.1	90.6	96.7	80.8	88.8
. Missed Repeat	0.0	7.8	3.3	0.0	2.9
. Excess Testing	0.0	1.6	0.0	19.2	7.8
. Cannot Determine	2.9	0.0	0.0	0.0	0.5
No Reportable Tymps	5.9	6.3	10.0	2.6	5.3

*Monthly EAR Center QA Report by Site and Examiner
Examinations Conducted 10-16-2010 through 4-14-2011
Report may not contain all records in this time period*

Site=MIAMI

Error Status	Audiometric Examiner					
	315 N=49	328 N=4	337 N=90	349 N=12	352 N=12	TOTAL N=167
	%	%	%	%	%	%
Error-Free Overall	67.3	75.0	67.8	33.3	66.7	65.3
Error-Free Audiometry	91.8	100.0	88.9	75.0	66.7	87.4
1000 Hz Test-ReTest Acceptable	100.0	100.0	100.0	100.0	100.0	100.0
Correct Transducer Used	100.0	100.0	100.0	100.0	91.7	99.4
Possible Placement Problems	.	.	.	.	.	.
. 500 Hz	16.3	25.0	3.3	8.3	8.3	8.4
. 2000 Hz	4.2	0.0	2.2	8.3	16.7	4.2
. 4000 Hz	0.0	0.0	0.0	0.0	0.0	0.0
AC Masking	.	.	.	.	.	.
. Correct	95.9	100.0	92.2	91.7	91.7	93.4
. Missed	4.1	0.0	6.7	0.0	8.3	5.4
. Excess Testing	0.0	0.0	0.0	8.3	0.0	0.6
. Incorrect Methods	0.0	0.0	1.1	0.0	0.0	0.6
. Cannot Determine	0.0	0.0	0.0	0.0	0.0	0.0
BC Masking	.	.	.	.	.	.
. Correct	93.9	100.0	93.3	75.0	83.3	91.6
. Missed	0.0	0.0	0.0	8.3	0.0	0.6
. Excess Testing	0.0	0.0	0.0	0.0	0.0	0.0
. Incorrect Methods	6.1	0.0	5.6	16.7	16.7	7.2
. Cannot Determine	0.0	0.0	1.1	0.0	0.0	0.6
Tymp Data Entry	.	.	.	.	.	.
. Correct	91.8	75.0	94.4	58.3	91.7	90.4
. Unknown	6.1	0.0	1.1	0.0	0.0	2.4
. Other	2.0	25.0	4.4	41.7	8.3	7.2
Tymp Repeats	.	.	.	.	.	.
. Correct	75.5	100.0	80.0	83.3	100.0	80.8
. Missed Repeat	10.2	0.0	14.4	8.3	0.0	11.4
. Excess Testing	10.2	0.0	4.4	8.3	0.0	6.0
. Cannot Determine	4.1	0.0	1.1	0.0	0.0	1.8
No Reportable Tymps	16.3	25.0	27.8	25.0	8.3	22.8

*Monthly EAR Center QA Report by Site and Examiner
Examinations Conducted 10-16-2010 through 4-14-2011
Report may not contain all records in this time period*

Site=SAN DIEGO

Error Status	Audiometric Examiner				
	406 N=48	425 N=20	457 N=15	460 N=48	TOTAL N=131
	%	%	%	%	%
Error-Free Overall	91.7	65.0	46.7	87.5	80.9
Error-Free Audiometry	95.8	75.0	66.7	91.7	87.8
1000 Hz Test-ReTest Acceptable	100.0	100.0	93.3	97.9	98.5
Correct Transducer Used	100.0	90.0	100.0	97.9	97.7
Possible Placement Problems	.	.	.	.	.
. 500 Hz	47.9	35.0	13.3	10.4	28.2
. 2000 Hz	18.8	30.0	26.7	0.0	14.5
. 4000 Hz	0.0	0.0	0.0	0.0	0.0
AC Masking	.	.	.	.	.
. Correct	95.8	95.0	80.0	97.9	94.7
. Missed	0.0	0.0	0.0	2.1	0.8
. Excess Testing	0.0	5.0	0.0	0.0	0.8
. Incorrect Methods	4.2	0.0	20.0	0.0	3.8
. Cannot Determine	0.0	0.0	0.0	0.0	0.0
BC Masking	.	.	.	.	.
. Correct	97.9	90.0	73.3	95.8	93.1
. Missed	0.0	0.0	0.0	0.0	0.0
. Excess Testing	0.0	5.0	0.0	2.1	1.5
. Incorrect Methods	2.1	5.0	26.7	2.1	5.3
. Cannot Determine	0.0	0.0	0.0	0.0	0.0
Tymp Data Entry	.	.	.	.	.
. Correct	100.0	90.0	86.7	97.9	96.2
. Unknown	0.0	0.0	0.0	0.0	0.0
. Other	0.0	10.0	13.3	2.1	3.8
Tymp Repeats	.	.	.	.	.
. Correct	95.8	100.0	66.7	97.9	93.9
. Missed Repeat	4.2	0.0	6.7	0.0	2.3
. Excess Testing	0.0	0.0	26.7	2.1	3.8
. Cannot Determine	0.0	0.0	0.0	0.0	0.0
No Reportable Tymps	0.0	0.0	13.3	0.0	1.5

*Cumulative EAR Center QA Report by Site
Examinations Conducted 3-4-2008 through 4-14-2011
Report may not contain all records in this time period*

Error Status	Site				
	BRONX N=3338	CHICAGO N=3687	MIAMI N=3667	SAN DIEGO N=3742	TOTAL N=14434
	%	%	%	%	%
Error-Free Overall	58.7	56.8	62.9	66.5	61.3
Error-Free Audiometry	82.0	79.7	83.8	84.1	82.4
1000 Hz Test-ReTest Acceptable	99.5	99.6	99.0	99.4	99.4
Correct Transducer Used	97.7	98.0	98.0	98.5	98.0
Possible Placement Problems	.	.	.	.	.
. 500 Hz	22.5	19.6	12.5	25.7	20.1
. 2000 Hz	9.1	6.0	14.5	10.1	9.9
. 4000 Hz	1.3	1.3	0.9	1.4	1.2
AC Masking	.	.	.	.	.
. Correct	95.3	94.7	94.5	96.0	95.1
. Missed	2.9	2.9	3.8	2.0	2.9
. Excess Testing	0.5	0.7	0.4	0.5	0.5
. Incorrect Methods	1.1	1.3	0.9	1.0	1.1
. Cannot Determine	0.3	0.4	0.4	0.5	0.4
BC Masking	.	.	.	.	.
. Correct	86.9	83.8	88.3	87.6	86.7
. Missed	3.7	4.4	2.2	1.8	3.0
. Excess Testing	1.6	2.8	2.4	1.7	2.1
. Incorrect Methods	7.3	8.3	6.5	7.8	7.5
. Cannot Determine	0.6	0.7	0.6	1.1	0.7
Tymp Data Entry	.	.	.	.	.
. Correct	86.9	79.9	91.3	84.5	85.6
. Unknown	8.0	7.4	2.2	7.1	6.1
. Other	5.1	12.7	6.5	8.4	8.3
Tymp Repeats	.	.	.	.	.
. Correct	74.3	81.0	79.4	84.3	79.9
. Missed Repeat	9.7	5.1	11.6	2.0	7.0
. Excess Testing	7.8	8.2	6.8	6.7	7.4
. Cannot Determine	8.2	5.7	2.1	7.0	5.7
No Reportable Tymps	8.4	6.3	13.9	4.1	8.1

Quality Control Report for All Operators

From: 4/23/2011 To: 5/23/2011

All IDs selected

525 Test Analyzed

Average number acceptable curves = 4.24

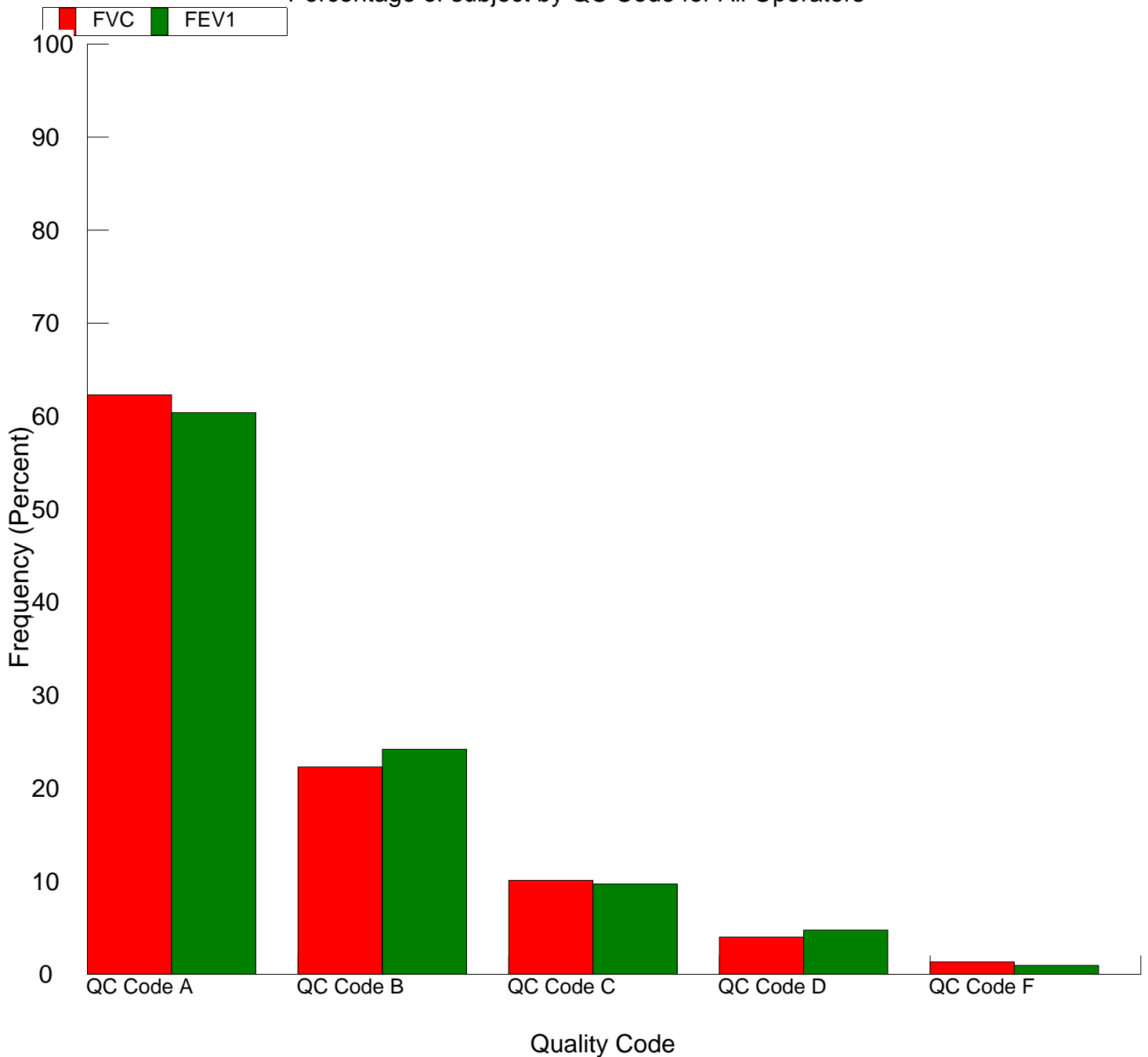
Average FVC QC Code = 3.40 Average FEV1 QC Code = 3.38

Percentage of non-repeatable tests = 8.2%

Percentage tests < 3 acceptable curves = 2.7%; 3.2% (EOT)

Percentage tests < 2 acceptable curves = 1.1%; 3.0% (EOT)

Percentage of subject by QC Code for All Operators



QC Summary Report
 From: 4/23/2011 To: 5/23/2011
 All IDs selected

214 calibration checks, 214 leak checks
 2 (0.9%) syringe calibration check errors
 No leak check errors

Quality Control Summary Report By Operator; A=4
 From: 4/23/2011 To: 5/23/2011
 All IDs selected

Operators	Number	NA	QC(FVC)	QC(FEV1)
All Operators	525	4.27	3.40	3.38
	2	4.03	4.00	4.00
108	66	4.56	3.18	3.14
110	32	4.16	3.50	3.38
126	75	4.72	3.43	3.36
209	25	3.93	3.60	3.60
277	31	3.52	3.48	3.48
298	67	3.41	2.99	2.87
330	59	4.97	3.29	3.39
349	5	3.10	2.60	3.00
352	1	3.00	4.00	4.00
406	31	4.29	3.71	3.65
447	18	4.91	3.33	3.50
449	33	3.75	3.42	3.36
450	25	4.41	3.64	3.80
460	24	4.27	3.92	3.92
636	31	4.60	3.77	3.74
All Operators	525	4.27	3.40	3.38

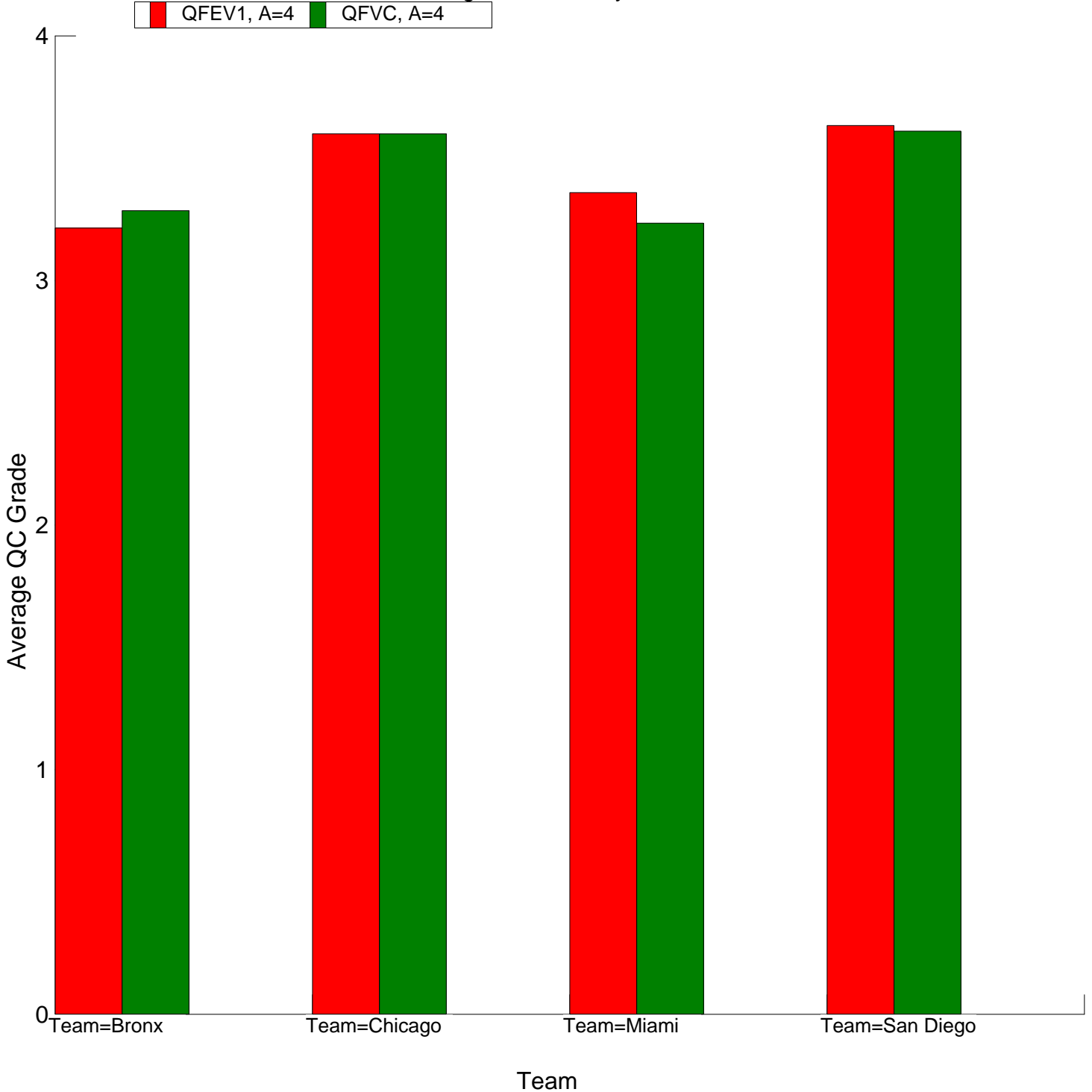
Quality Control Report by Team

From: 4/23/2011 To: 5/23/2011

All IDs selected

Team	NTests	AQFVC	AQFEV1
Bronx	98	3.29	3.21
Chicago	25	3.60	3.60
Miami	64	3.23	3.36
San Diego	131	3.61	3.63

Average QC Code by Team



Quality Control Report for All Operators

From: 10/30/2007 To: 5/23/2011

All IDs selected

16739 Test Analyzed

Average number acceptable curves = 4.23

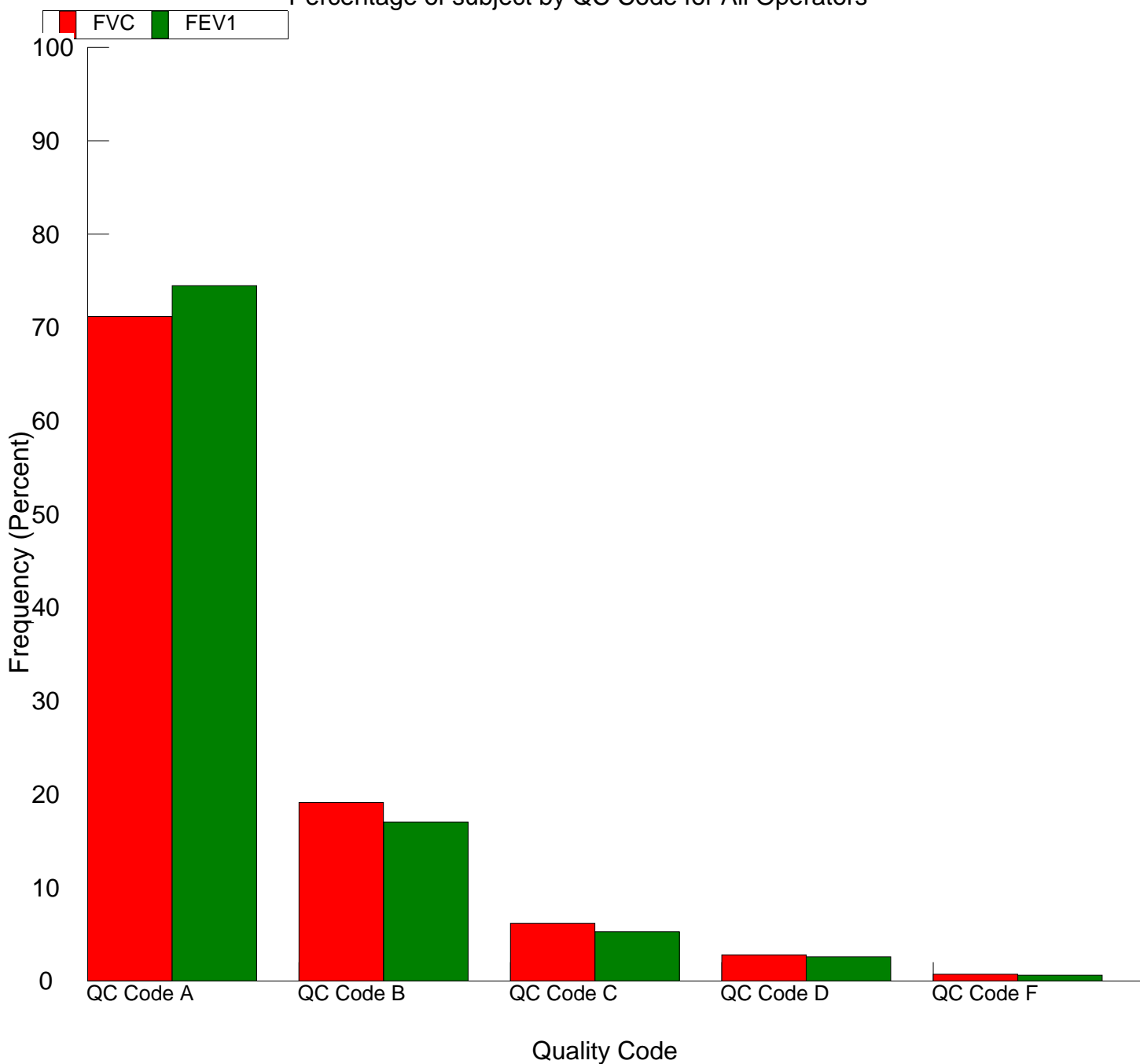
Average FVC QC Code = 3.57 Average FEV1 QC Code = 3.62

Percentage of non-repeatable tests = 6.7%

Percentage tests < 3 acceptable curves = 1.4%; 2.4% (EOT)

Percentage tests < 2 acceptable curves = 0.6%; 1.4% (EOT)

Percentage of subject by QC Code for All Operators



QC Summary Report

From: 10/30/2007 To: 5/23/2011

All IDs selected

14827 calibration checks, 14448 leak checks

381 (2.6%) syringe calibration check errors

258 (1.8%) leak check errors

Quality Control Summary Report By Operator; A=4

From: 10/30/2007 To: 5/23/2011

All IDs selected

Operators	Number	NA	QC(FVC)	QC(FEV1)
All Operators	16739	4.27	3.57	3.62
	2	4.03	4.00	4.00
108	1180	4.27	3.48	3.48
110	1233	4.03	3.33	3.44
111	937	4.03	3.41	3.50
112	178	4.25	3.31	3.35
126	354	4.49	3.50	3.41
142	1	4.00	4.00	3.00
209	888	4.47	3.51	3.66
211	417	4.95	3.64	3.74
212	30	4.24	3.00	3.30
213	370	3.81	3.54	3.67
214	3	4.75	3.67	3.00
222	136	3.96	3.60	3.65
226	110	4.55	3.51	3.58
230	131	4.25	3.48	3.40
236	1005	3.78	3.69	3.77
259	20	3.65	3.60	3.65
277	225	3.54	3.30	3.39
279	80	4.77	3.56	3.65
298	581	3.38	3.42	3.41
310	140	4.54	3.69	3.77
316	388	4.62	3.84	3.85
317	2	3.54	2.50	2.00
330	2226	4.65	3.71	3.77
349	291	3.90	3.54	3.63
352	287	4.97	3.73	3.70
353	25	4.65	3.76	3.76
360	802	4.36	3.82	3.82
372	74	4.16	3.72	3.77
406	660	4.19	3.58	3.60
409	140	3.88	3.44	3.46
410	183	4.10	3.53	3.57
412	1	3.00	3.00	4.00
420	1	3.00	4.00	4.00
425	703	4.14	3.56	3.58
435	32	4.20	3.66	3.56
437	233	4.37	3.73	3.67
447	561	4.36	3.48	3.53
449	354	4.22	3.55	3.58
450	487	4.45	3.67	3.70
457	597	4.60	3.60	3.64
460	472	4.37	3.65	3.68
636	193	4.20	3.68	3.69
646	5	4.26	3.00	3.00
JB	1	4.00	1.00	1.00
All Operators	16739	4.27	3.57	3.62

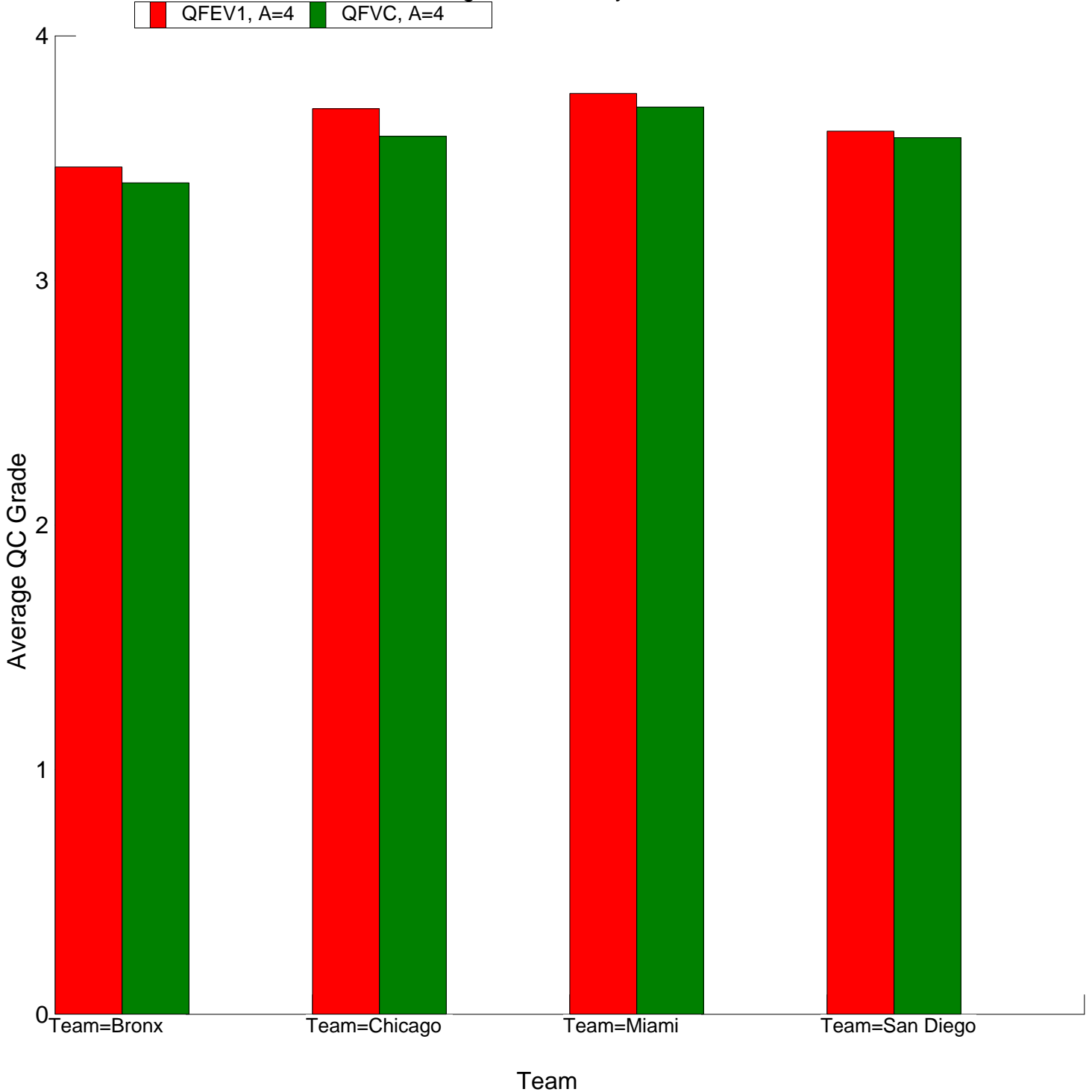
Quality Control Report by Team

From: 10/30/2007 To: 5/23/2011

All IDs selected

Team	NTests	AQFVC	AQFEV1
Bronx	3528	3.40	3.46
Chicago	2959	3.59	3.70
Miami	3047	3.71	3.76
San Diego	4424	3.58	3.61

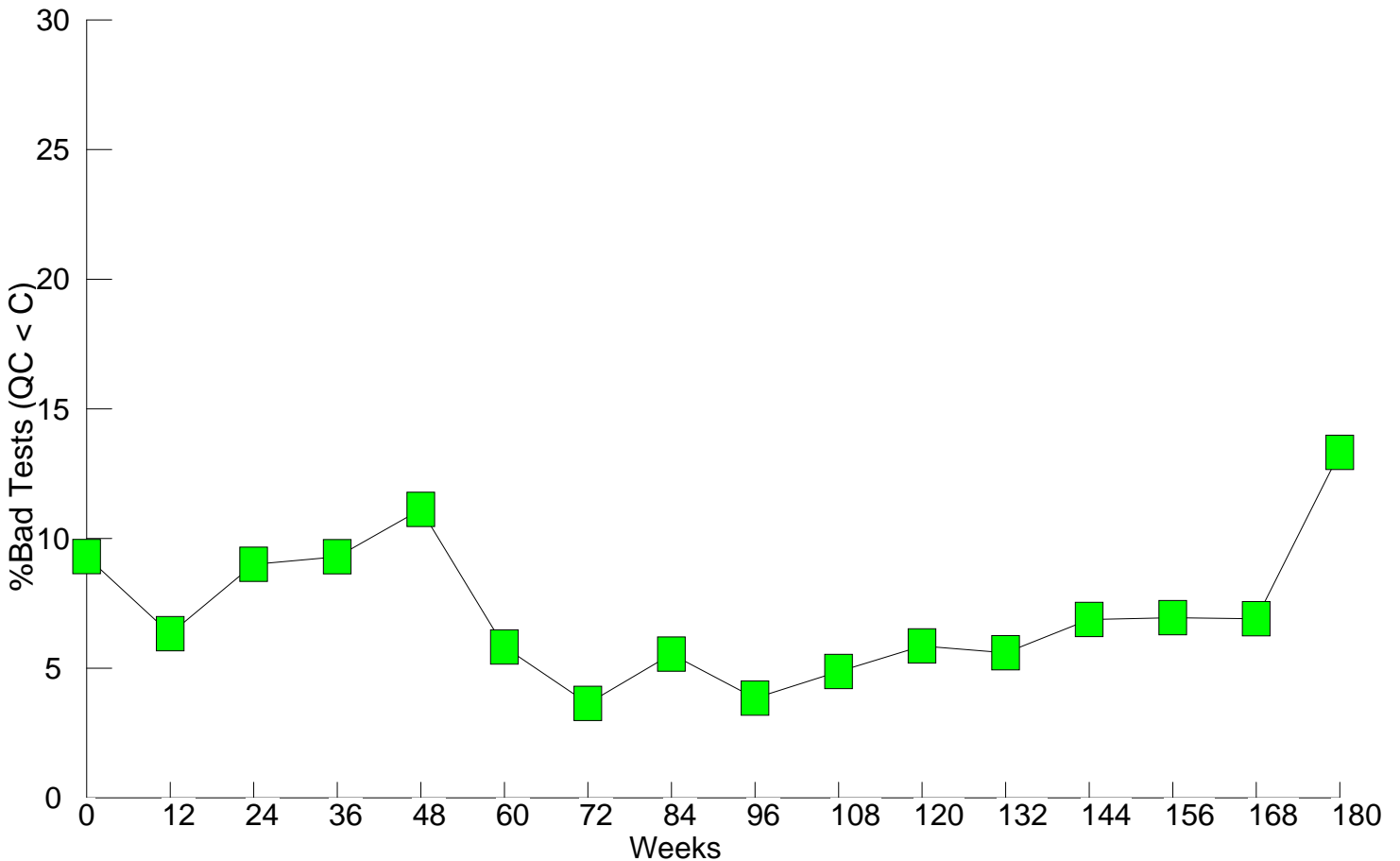
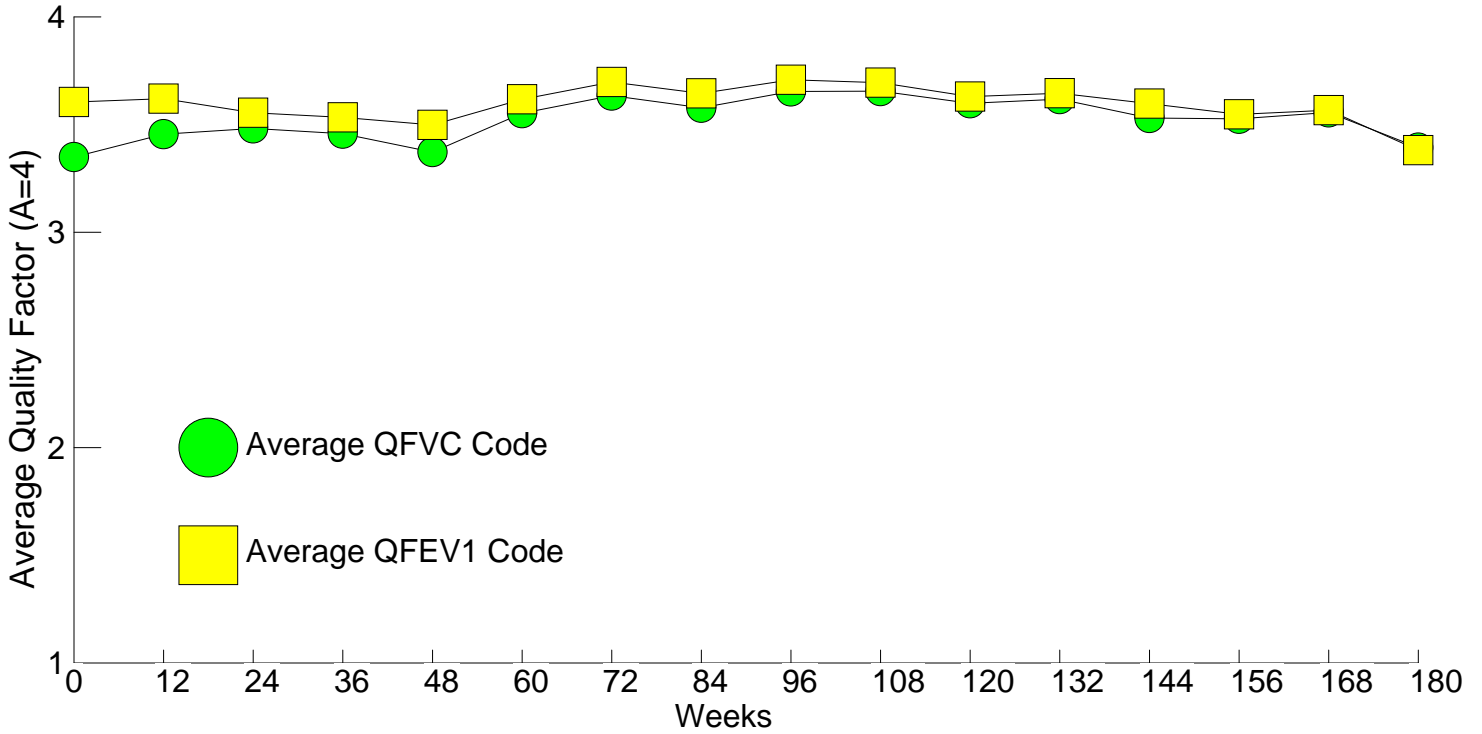
Average QC Code by Team



Trend Period 10/30/2007 to 5/23/2011 (180 weeks)

Week	N	QFVC	QFEV1	%Bad	Week	N	QFVC	QFEV1	%Bad	Week	N	QFVC	QFEV1	%Bad
0	43	3.35	3.60	9.3%	12	158	3.46	3.62	6.3%	24	533	3.48	3.56	9.0%
36	710	3.46	3.53	9.3%	48	827	3.37	3.50	11.1%	60	1084	3.55	3.62	5.8%
72	1374	3.63	3.70	3.6%	84	1570	3.58	3.65	5.5%	96	1405	3.65	3.71	3.8%
108	1294	3.66	3.69	4.9%	120	1400	3.60	3.63	5.9%	132	1395	3.62	3.65	5.6%
144	1775	3.53	3.60	6.9%	156	1396	3.53	3.55	6.9%	168	1608	3.56	3.57	6.9%
180	443	3.39	3.38	13.3%										

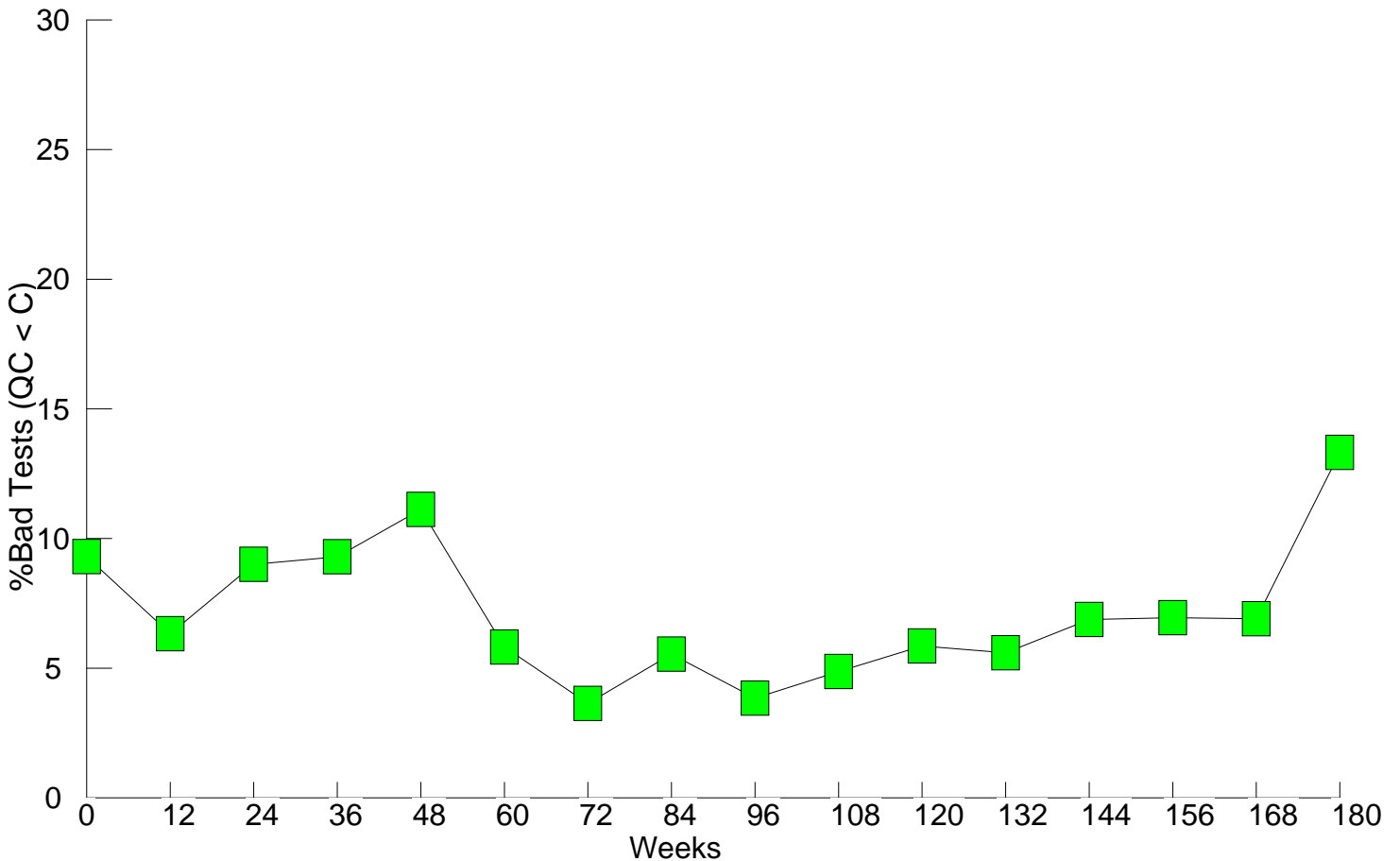
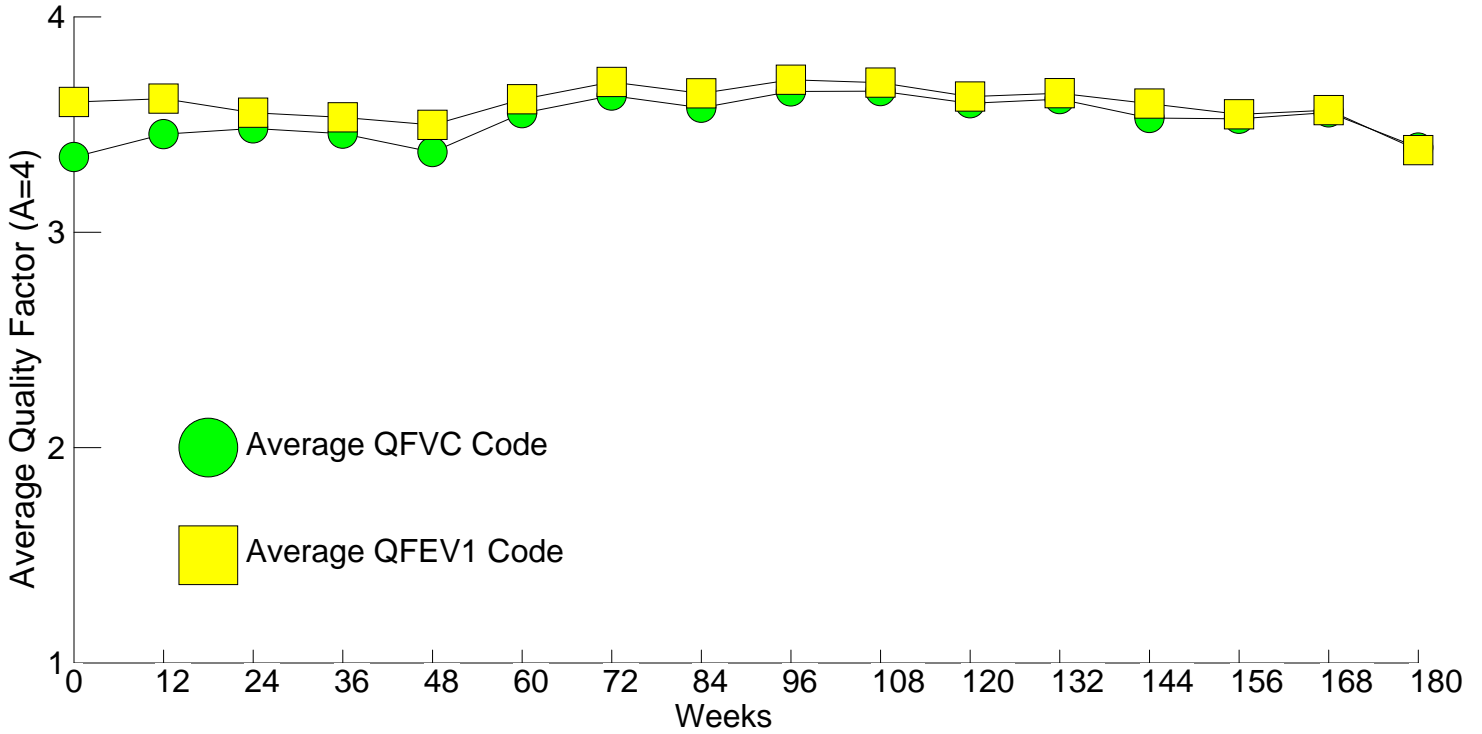
QC Code Trends for All Operators; 4=A, 3=B, 2=C, 1=D, 0=F



Trend Period 10/30/2007 to 5/23/2011 (180 weeks)

Week	N	QFVC	QFEV1	%Bad	Week	N	QFVC	QFEV1	%Bad	Week	N	QFVC	QFEV1	%Bad
0	43	3.35	3.60	9.3%	12	158	3.46	3.62	6.3%	24	533	3.48	3.56	9.0%
36	710	3.46	3.53	9.3%	48	827	3.37	3.50	11.1%	60	1084	3.55	3.62	5.8%
72	1374	3.63	3.70	3.6%	84	1570	3.58	3.65	5.5%	96	1405	3.65	3.71	3.8%
108	1294	3.66	3.69	4.9%	120	1400	3.60	3.63	5.9%	132	1395	3.62	3.65	5.6%
144	1775	3.53	3.60	6.9%	156	1396	3.53	3.55	6.9%	168	1608	3.56	3.57	6.9%
180	443	3.39	3.38	13.3%										

QC Code Trends for All Operators; 4=A, 3=B, 2=C, 1=D, 0=F



Trend Period 5/23/2010 to 5/23/2011 (48 weeks)

Week	N	QFVC	QFEV1	%Bad	Week	N	QFVC	QFEV1	%Bad	Week	N	QFVC	QFEV1	%Bad
0	467	3.64	3.70	4.9%	4	445	3.60	3.62	6.3%	8	492	3.60	3.59	6.1%
12	596	3.52	3.58	8.7%	16	620	3.57	3.64	5.2%	20	575	3.51	3.58	5.9%
24	500	3.52	3.55	6.2%	28	342	3.48	3.45	9.4%	32	518	3.51	3.58	7.9%
36	542	3.61	3.60	4.8%	40	551	3.53	3.54	8.0%	44	575	3.49	3.49	9.4%
48	232	3.42	3.37	12.5%										

QC Code Trends for All Operators; 4=A, 3=B, 2=C, 1=D, 0=F

