Appendix:

Figure 1: Balance of continuous variables among propensity matched cohorts.

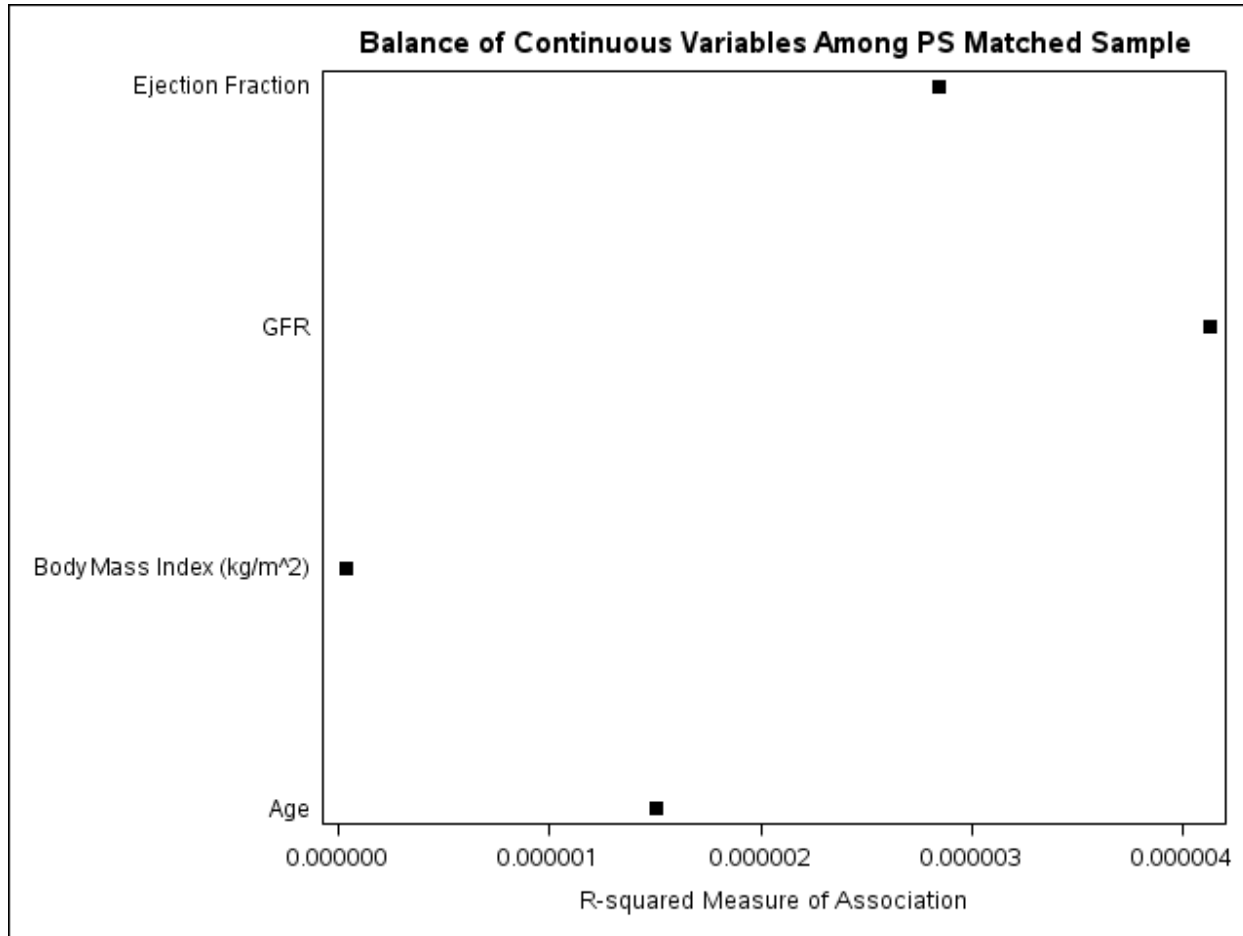Balance of Continuous Variables Among PS Matched Sample

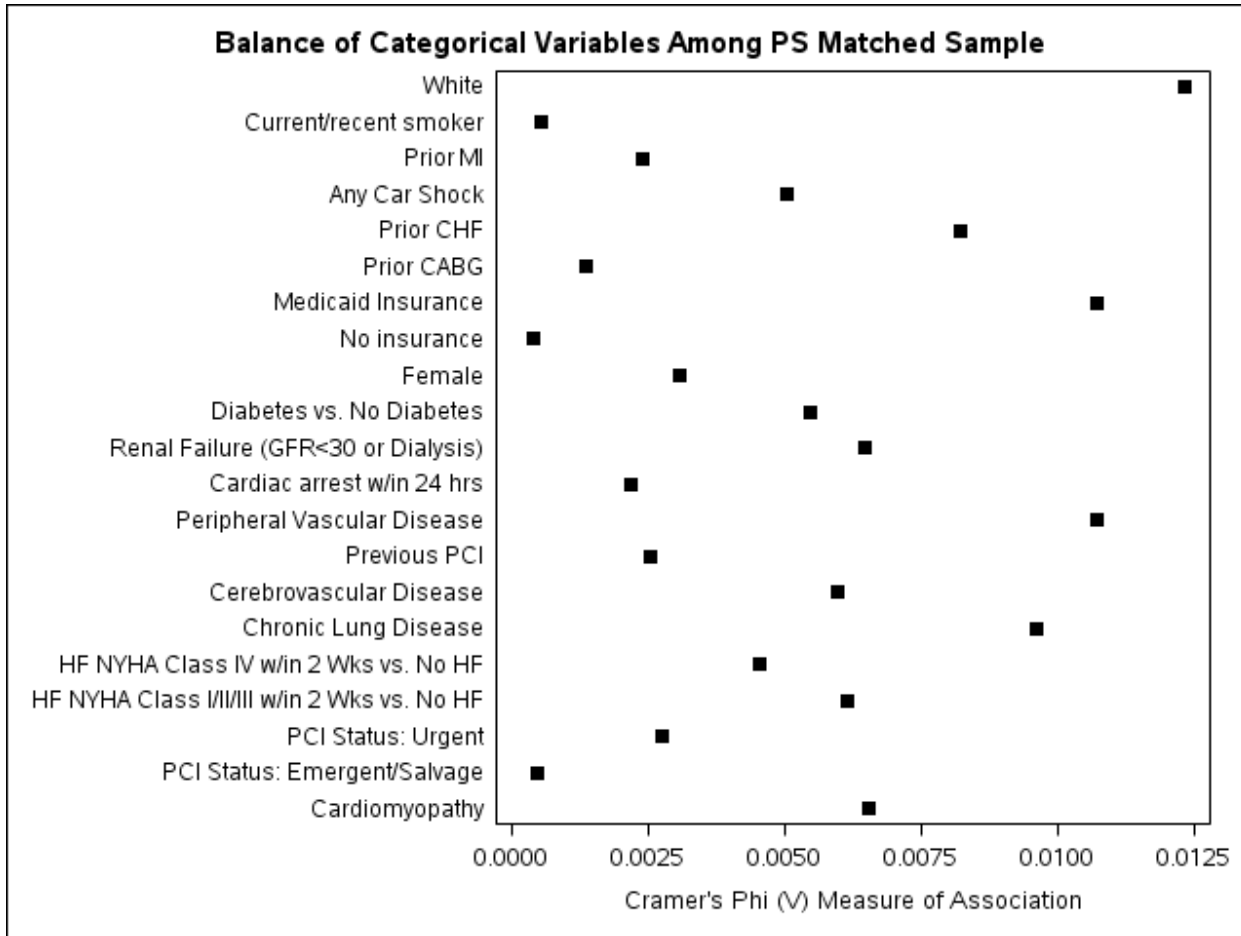Figure 2: Balance of categorical variables among propensity matched cohorts.

Figure 3: Sensitivity analysis given Gamma (i.e. odds) = 2 for presence of an unmeasured confounder and its effect on mortality. Statistical significance for mortality is nullified once the estimated prevalence of the confounder is ≥ 40% in the CQI cohort and ≤ 10% in the PR cohort and reverses trend (i.e. higher likelihood of mortality in the PR cohort) once the estimated prevalence of the confounder is ≥ 80% in the CQI cohort and ≤ 10% in the PR cohort.

Gamma = 2	Prevalence among CQI pts																																	
	0			0.1			0.2			0.3			0.4			0.5			0.6			0.7			0.8			0.9			1		
Prev. among PR pts	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL	OR	LL	UL
0	0.72	0.63	0.83	0.79	0.69	0.91	0.86	0.75	0.99	0.93	0.81	1.07	1.01	0.88	1.16	1.08	0.94	1.24	1.15	1	1.32	1.22	1.06	1.4	1.29	1.13	1.49	1.36	1.19	1.57	1.44	1.25	1.65
0.1	0.65	0.57	0.75	0.72	0.63	0.83	0.78	0.68	0.9	0.85	0.74	0.98	0.91	0.8	1.05	0.98	0.85	1.13	1.04	0.91	1.2	1.11	0.97	1.28	1.17	1.02	1.35	1.24	1.08	1.43	1.31	1.14	1.5
0.2	0.6	0.52	0.69	0.66	0.57	0.76	0.72	0.63	0.83	0.78	0.68	0.89	0.84	0.73	0.96	0.9	0.78	1.03	0.96	0.83	1.1	1.02	0.89	1.17	1.08	0.94	1.24	1.14	0.99	1.31	1.2	1.04	1.38
0.3	0.55	0.48	0.64	0.61	0.53	0.7	0.66	0.58	0.76	0.72	0.63	0.83	0.77	0.67	0.89	0.83	0.72	0.95	0.88	0.77	1.02	0.94	0.82	1.08	0.99	0.87	1.14	1.05	0.91	1.21	1.1	0.96	1.27
0.4	0.51	0.45	0.59	0.56	0.49	0.65	0.62	0.54	0.71	0.67	0.58	0.77	0.72	0.63	0.83	0.77	0.67	0.89	0.82	0.71	0.94	0.87	0.76	1	0.92	0.8	1.06	0.97	0.85	1.12	1.03	0.89	1.18
0.5	0.48	0.42	0.55	0.53	0.46	0.61	0.57	0.5	0.66	0.62	0.54	0.72	0.67	0.58	0.77	0.72	0.63	0.83	0.77	0.67	0.88	0.81	0.71	0.94	0.86	0.75	0.99	0.91	0.79	1.05	0.96	0.83	1.1
0.6	0.45	0.39	0.52	0.49	0.43	0.57	0.54	0.47	0.62	0.58	0.51	0.67	0.63	0.55	0.72	0.67	0.59	0.77	0.72	0.63	0.83	0.76	0.66	0.88	0.81	0.7	0.93	0.85	0.74	0.98	0.9	0.78	1.03
0.7	0.42	0.37	0.49	0.46	0.4	0.53	0.51	0.44	0.58	0.55	0.48	0.63	0.59	0.51	0.68	0.63	0.55	0.73	0.68	0.59	0.78	0.72	0.63	0.83	0.76	0.66	0.87	0.8	0.7	0.92	0.84	0.74	0.97
0.8	0.4	0.35	0.46	0.44	0.38	0.5	0.48	0.42	0.55	0.52	0.45	0.6	0.56	0.49	0.64	0.6	0.52	0.69	0.64	0.56	0.73	0.68	0.59	0.78	0.72	0.63	0.83	0.76	0.66	0.87	0.8	0.69	0.92
0.9	0.38	0.33	0.43	0.42	0.36	0.48	0.45	0.39	0.52	0.49	0.43	0.57	0.53	0.46	0.61	0.57	0.49	0.65	0.6	0.53	0.7	0.64	0.56	0.74	0.68	0.59	0.78	0.72	0.63	0.83	0.76	0.66	0.87
1	0.36	0.31	0.41	0.39	0.34	0.45	0.43	0.38	0.5	0.47	0.41	0.54	0.5	0.44	0.58	0.54	0.47	0.62	0.57	0.5	0.66	0.61	0.53	0.7	0.65	0.56	0.74	0.68	0.59	0.78	0.72	0.63	0.83

Appendix:

Figure 4: Sensitivity analysis given Gamma (i.e. odds) = 5 for presence of an unmeasured confounder and its effect on mortality. The impact of unmeasured confounding becomes more pronounced (i.e. inference changes more dramatically for lower prevalence of the confounder in the CQI group) when the risk associated with the confounder increases (i.e. Gamma = 5 instead of 2).

Gamma = 5	Prevalence among CQI pts																																
	0			0.1			0.2			0.3			0.4			0.5			0.6			0.7			0.8			0.9			1		
Prev. among PR pts	OR	L	U	OR	L	U	OR	L	U	OR	L	U	OR	L	U	OR	L	U	OR	L	U	OR	L	U	OR	L	U	OR	L	U	OR	L	U
0	0.72	0.63	0.83	1.01	0.88	1.16	1.29	1.13	1.49	1.58	1.38	1.82	1.87	1.63	2.15	2.15	1.88	2.48	2.44	2.13	2.81	2.73	2.38	3.14	3.02	2.63	3.47	3.3	2.87	3.8	3.59	3.13	4.13
0.1	0.51	0.45	0.59	0.72	0.63	0.83	0.92	0.8	1.06	1.13	0.98	1.3	1.33	1.16	1.53	1.54	1.34	1.77	1.74	1.52	2.01	1.95	1.7	2.24	2.15	1.88	2.48	2.36	2.05	2.71	2.56	2.23	2.95
0.2	0.4	0.35	0.46	0.56	0.49	0.64	0.72	0.63	0.83	0.88	0.76	1.01	1.04	0.9	1.19	1.2	1.04	1.38	1.36	1.18	1.56	1.52	1.32	1.74	1.68	1.46	1.93	1.83	1.6	2.11	1.99	1.74	2.29
0.3	0.33	0.28	0.38	0.46	0.4	0.53	0.59	0.51	0.68	0.72	0.63	0.83	0.85	0.74	0.98	0.98	0.85	1.13	1.11	0.97	1.28	1.24	1.08	1.43	1.37	1.19	1.58	1.5	1.31	1.73	1.63	1.42	1.88
0.4	0.28	0.24	0.32	0.39	0.34	0.44	0.5	0.43	0.57	0.61	0.53	0.7	0.72	0.63	0.83	0.83	0.72	0.95	0.94	0.82	1.08	1.05	0.91	1.21	1.16	1.01	1.33	1.27	1.11	1.46	1.38	1.2	1.59
0.5	0.24	0.21	0.28	0.34	0.29	0.39	0.43	0.38	0.5	0.53	0.46	0.61	0.62	0.54	0.72	0.72	0.63	0.83	0.81	0.71	0.94	0.91	0.79	1.05	1.01	0.88	1.16	1.1	0.96	1.27	1.2	1.04	1.38
0.6	0.21	0.18	0.24	0.3	0.26	0.34	0.38	0.33	0.44	0.46	0.4	0.53	0.55	0.48	0.63	0.63	0.55	0.73	0.72	0.63	0.83	0.8	0.7	0.92	0.89	0.77	1.02	0.97	0.85	1.12	1.06	0.92	1.21
0.7	0.19	0.16	0.22	0.26	0.23	0.3	0.34	0.3	0.39	0.42	0.36	0.48	0.49	0.43	0.57	0.57	0.49	0.65	0.64	0.56	0.74	0.72	0.63	0.83	0.79	0.69	0.91	0.87	0.76	1	0.94	0.82	1.09
0.8	0.17	0.15	0.2	0.24	0.21	0.28	0.31	0.27	0.35	0.38	0.33	0.43	0.44	0.39	0.51	0.51	0.45	0.59	0.58	0.51	0.67	0.65	0.57	0.75	0.72	0.63	0.83	0.79	0.68	0.9	0.85	0.74	0.98
0.9	0.16	0.14	0.18	0.22	0.19	0.25	0.28	0.24	0.32	0.34	0.3	0.4	0.41	0.35	0.47	0.47	0.41	0.54	0.53	0.46	0.61	0.59	0.52	0.68	0.66	0.57	0.75	0.72	0.63	0.83	0.78	0.68	0.9
1	0.14	0.13	0.17	0.2	0.18	0.23	0.26	0.23	0.3	0.32	0.28	0.36	0.37	0.33	0.43	0.43	0.38	0.5	0.49	0.43	0.56	0.55	0.48	0.63	0.6	0.53	0.69	0.66	0.58	0.76	0.72	0.63	0.83