

# **CCIIO and NAIC Dataset Comparison Output**

### Credibility of NAIC Insurers - Individual Market

		201	11			2012						
Individual	Not matched(1)	Matched(2)	Δ(1)-(2) t-statistic	N1	N2	Not matched(1)	Matched(2)	Δ(1)-(2) t-statistic	N1	N2		
Credible (proportion)	0.035	0.282	-0.247***	171	1847	0.020	0.368	-0.348***	151	1600		
			(0.02)					(0.02)				
Non- credible (proportion)	0.965	0.718	0.247***	171	1847	0.980	0.632	0.348***	151	1600		
(p. op of doing)			(0.02)					(0.02)				
Partially- credible (proportion)	0.029	0.266	-0.237***	171	1847	0.020	0.334	-0.314***	151	1600		
(p. op of doing)			(0.02)					(0.02)				
Fully- credible (proportion)	0.006	0.016	-0.010	171	1847	0.000	0.034	-0.034***	151	1600		
			(0.01)					(0.00)				
Ν	2018					1751						

Notes: Matched insurers are insurer-state observations identified in both NAIC and CCIIO data sets. Not matched insurers are insurer-state observations identified only in NAIC.

Non credible insurers have less than 1000 life-years in the reporting year. Partially credible insurers have at least 1000 life-years and less than 75000 life-years in the reporting year. Fully credible insurers have greater than 75000 life-years in the reporting year.

Standard error in parentheses. \*\*\* p-value < 0.01. \*\* p-value < 0.05. \*p-value < 0.10.

#### Credibility of NAIC Insurers - Small Group Market

		201	1				201	2		
Small group	Not matched(1)	Matched(2)	∆(1)-(2) t-statistic	N1	N2	Not matched(1)	Matched(2)	∆(1)-(2) t-statistic	N1	N2
Credible (proportion)	0.520	0.533	-0.013	25	993	0.552	0.631	-0.080	29	906
			(0.10)					(0.10)		
Non- credible (proportion)	0.480	0.467	0.013	25	993	0.448	0.369	0.080	29	906
(1			(0.10)					(0.10)		
Partially- credible (proportion)	0.480	0.469	0.011	25	993	0.448	0.514	-0.066	29	906
			(0.10)					(0.10)		
Fully- credible (proportion)	0.040	0.063	-0.023	25	993	0.103	0.117	-0.014	29	906
(F. 5 F 5 . 5 . 5 . 7			(0.04)					(0.06)		
Ν	1018					935				

Notes: Matched insurers are insurer-state observations identified in both NAIC and CCIIO data sets. Not matched insurers are insurer-state observations identified only in NAIC.

Non credible insurers have less than 1000 life-years in the reporting year. Partially credible insurers have at least 1000 life-years and less than 75000 life-years in the reporting year. Fully credible insurers have greater than 75000 life-years in the reporting year.

Standard error in parentheses. \*\*\* p-value < 0.01. \*\* p-value < 0.05. \*p-value < 0.10.

### Credibility of NAIC Insurers - Large Group Market

		201	1				201	2		
Large group	Not matched(1)	Matched(2)	Δ(1)-(2) t-statistic	N1	N2	Not matched(1)	Matched(2)	∆(1)-(2) t-statistic	N1	N2
Credible (proportion)	0.542	0.638	-0.096	48	884	0.551	0.745	-0.194*	49	851
			(0.07)					(0.07)		
Non- credible (proportion)	0.458	0.362	0.096	48	884	0.449	0.255	0.194*	49	851
			(0.07)					(0.07)		
Partially- credible (proportion)	0.479	0.489	-0.010	48	884	0.469	0.517	-0.048	49	851
			(0.07)					(0.07)		
Fully- credible (proportion)	0.063	0.149	-0.087*	48	884	0.082	0.228	-0.146***	49	851
			(0.04)					(0.04)		
Ν	932					900				
Notes: Matche	ed insurers are	insurer-state o	bservations i	dentifie	d in bo	th NAIC and CC	IIO data sets. N	ot matched i	nsurers	are

Notes: Matched insurers are insurer-state observations identified in both NAIC and CCIIO data sets. Not matched insurers are insurer-state observations identified only in NAIC.

Non credible insurers have less than 1000 life-years in the reporting year. Partially credible insurers have at least 1000 life-years and less than 75000 life-years in the reporting year. Fully credible insurers have greater than 75000 life-years in the reporting year.

Standard error in parentheses. \*\*\* p-value < 0.01. \*\* p-value < 0.05. \*p-value < 0.10.

### Characteristics of Credible NAIC Insurers - Individual Market

		Year	2011			Year 2012					
Individual Market (2011 N 2,018; 2012 N 1,751)	Not matched (1)	Matched (2)	Δ(1)-(2) t-statistic	N1	N2	Not matched (1)	Matched (2)	Δ(1)-(2) t-statistic	N1	N2	
Premiums earned including state and federal high risk programs per life- year (mean)	1080.570	2719.217	-1638.647*	6	521	2154.982	3074.876	-919.893	1	437	
year (mean)			(635.62)					(.)			
Regulatory authority licenses and fees per life-year (mean)	1.043	2.763	-1.720	6	521	0.000	4.955	-4.955	1	437	
- , ,			(1.08)					(.)			
Deductible Fraud and Abuse Detection/Recovery Expenses per life- year (mean)	0.100	3.824	-3.723***	6	521	0.000	2.485	-2.485	1	437	
			(0.47)					(.)			
Incurred claims excluding prescription drugs per life-year(mean)	753.663	2149.904	-1396.241*	6	521	1668.589	2635.317	-966.727	1	437	
			(514.58)					(.)			
Expenses to improve patient safety and reduce medical errors non-HIT per life-year (mean)	5.882	12.455	-6.573	6	521	0.000	19.217	-19.217	1	437	
HIT expenses related			(4.04)					(.)			
to health improvement (mean)	0.208	2.867	-2.659***	6	521	0.000	4.405	-4.405	1	437	
			(0.29)					(.)			
Expenses to improve patient safety and reduce medical errors per life-year (meen)	6.090	15.322	-9.232	6	521	0.000	23.622	-23.622	1	437	
(mean)			(4.13)					(.)			
Preliminary Medical Loss Ratio (mean)	0.316	0.801	-0.484*	6	521	0.774	0.854	-0.080	1	437	
			(0.15)					(.)			

Life-years (mean)	25630.431	19550.351	6080.080 (24441.19)	6	521	1021.583	20917.685	-19896.101 (.)	1	437
Aggregated life- years (mean)	25630.431	19550.351	6080.080	6	521	2667.750	31305.317	-28637.567	1	437
			(24441.19)					(.)		
Partially-credible (proportion)	0.833	0.942	-0.109	6	521	1.000	0.874	0.126	1	437
			(0.17)					(.)		
Fully-credible (proportion)	0.167	0.058	0.109	6	521	0.000	0.126	-0.126	1	437
			(0.17)					(.)		
Meets preliminary MLR threshold (proportion)	0.250	0.478	-0.228	4	519	0.000	0.625	-0.625	1	437
			(0.25)					(.)		
Meets aggregation adjusted MLR (proportion)	0.250	0.478	-0.228	4	519	0.000	0.538	-0.538	1	437
(proportion)			(0.25)					(.)		
Meets credibility adjusted MLR (proportion)	0.250	0.570	-0.320	4	519	1.000	0.629	0.371	1	437
			(0.25)					(.)		
Sample N	527					438				
Standard error in pare observations identifie										

NAIC.

## Characteristics of Credible NAIC Insurers - Small Group Market

		Yea	ır 2011				Yea	r 2012		
Small Group Market (2011 N 1,018; 2012 N 935)	Not matched (1)	Matched (2)	Δ(1)-(2) t-statistic	N1	N2	Not matched (1)	Matched (2)	Δ(1)-(2) t-statistic	N1	N2
Premiums earned including state and federal high risk programs per life- year (mean)	431.534	4140.157	-3708.624***	13	529	897.143	4223.557	-3326.414***	15	48
year (meany			(302.53)					(429.29)		
Regulatory authority licenses and fees per life- year (mean)	0.553	4.982	-4.430***	13	529	1.912	5.226	-3.313	15	48
,,			(1.04)					(1.70)		
Deductible Fraud and Abuse Detection/Recovery Expenses per life- year (mean)	0.120	0.854	-0.734***	13	529	0.000	0.920	-0.920***	15	48
year (mean)			(0.17)					(0.12)		
Incurred claims excluding prescription drugs per life-year(mean)	329.209	3300.553	-2971.345***	13	529	754.756	3412.942	-2658.186***	15	48
. ,			(264.72)					(360.43)		
Expenses to improve patient safety and reduce medical errors non- HIT per life-year (mean)	2.087	26.358	-24.271***	13	529	2.832	30.236	-27.405***	15	48
(			(1.38)					(2.42)		
HIT expenses related to health improvement (mean)	0.227	4.486	-4.259***	13	529	0.071	6.456	-6.384***	15	48
(mean)			(0.35)					(0.31)		
Expenses to improve patient safety and reduce medical errors per life-year (mean)	2.314	30.844	-28.530***	13	529	2.903	36.692	-33.789***	15	48
- , (can)			(1.58)					(2.51)		
Preliminary Medical Loss Ratio (mean)	0.481	0.833	-0.351**	13	529	0.806	0.842	-0.036	15	48

			(0.08)					(0.12)		
Life-years (mean)	26504.097	32599.950	-6095.853	13	529	22356.666	31847.572	-9490.905	15	483
			(11153.83)					(9820.04)		
Aggregated life-	26504.097	32599.950	-6095.853	13	529	35876.550	45439.336	-9562.786	15	483
years (mean)			(11153.83)					(11406.71)		
Partially-credible (proportion)	0.923	0.881	0.042	13	529	0.800	0.781	0.019	15	483
			(0.08)					(0.11)		
Fully-credible (proportion)	0.077	0.119	-0.042	13	529	0.200	0.219	-0.019	15	483
(proportion)			(0.08)					(0.11)		
Meets preliminary MLR threshold	0.250	0.645	-0.395*	12	529	0.571	0.710	-0.139	14	483
(proportion)			(0.13)					(0.14)		
			. ,					. ,		
Meets aggregation adjusted MLR	0.250	0.645	-0.395*	12	529	0.286	0.706	-0.420**	14	483
(proportion)			(0.13)					(0.13)		
Meets credibility adjusted MLR (proportion)	0.250	0.769	-0.519**	12	529	0.357	0.785	-0.428**	14	483
(proportion)			(0.13)					(0.13)		
Sample N	542					498				
Standard error in par observations identifie		•	•	ue < 0	.05. * I	f p-value < 0.	10. Matched	insurers are in	surer-s	state

## Characteristics of Credible NAIC Insurers - Large Group Market

		Ye	ar 2011			Year 2012					
Large Group Market (2011 N 932; 2012 N 900)	Not matched (1)	Matched (2)	∆(1)-(2) t-statistic	N1	N2	Not matched (1)	Matched (2)	∆(1)-(2) t-statistic	N1	N2	
Premiums earned including state and federal high risk programs per life-year	1887.34	4225.41	-2338.067***	26	564	1650.284	4307.505	-2657.221***	26	570	
(mean)			-470.64					-425.19			
Regulatory authority licenses and fees per life-year (mean)	8.686	4.426	4.26	26	564	12.264	5.772	6.492	26	570	
ine year (mean)			-6.28					-7.92			
Deductible Fraud and Abuse Detection/Recovery Expenses per life-year	0	0.526	-0.526***	26	564	0	0.724	-0.724***	26	570	
(mean)			-0.07				-0.08				
Incurred claims excluding prescription drugs per life- year(mean)	1697.686	3560.06	-1862.369***	26	564	1399.495	3674.258	-2274.763***	26	570	
year(mean)			-429.2					-348.57			
Expenses to improve patient safety and reduce medical errors non-HIT per life-year	1.24	28.881	-27.641***	26	564	2.374	31.513	-29.139***	26	570	
(mean)			-0.86					-1.67			
HIT expenses related to health improvement (mean)	0.113	4.899	-4.785***	26	564	0.101	6.613	-6.511***	26	570	
improvement (mean)			-0.28					-0.3			
Expenses to improve patient safety and reduce medical errors per life-year (mean)	1.353	33.78	-32.426***	26	564	2.476	38.126	-35.650***	26	570	
per me year (mean)			-0.99					-1.8			
Preliminary Medical Loss Ratio (mean)	0.896	0.874	0.022	26	564	1.039	0.882	0.157*	26	570	

			-0.05					-0.07		
Life-years (mean)	17132.39	70456.1	-53323.711*** -8432.31	26	564	16365.52	63174.33	-46808.811*** -8204.45	26	570
Aggregated life-years (mean)	17132.39	70456.1	-53323.711***	26	564	21592.73	77782.12	-56189.388***	26	570
(ea)			(8432.31)					(8461.33)		
Partially-credible (proportion)	0.885	0.766	0.119	26	564	0.885	0.789	0.095	26	570
(p. operation)			(0.07)					(0.07)		
Fully-credible (proportion)	0.115	0.234	-0.119	26	564	0.115	0.211	-0.095	26	570
(p. oportion)			(0.07)					(0.07)		
Meets preliminary MLR threshold (proportion)	0.615	0.663	-0.048	26	564	0.654	0.729	-0.076	26	569
			(0.10)					(0.10)		
Meets aggregation adjusted MLR (proportion)	0.615	0.663	-0.048	26	564	0.731	0.703	0.028	26	569
(p. op of d. of f			(0.10)					(0.09)		
Meets credibility adjusted MLR (proportion)	0.692	0.782	-0.09	26	564	0.808	0.803	0.005	26	569
AF - F			(0.09)					(0.08)		
	590					596				

		Year	2011				Year	2012		
Individual Market (2011 N 2,018; 2012 N 1,751)	CCIIO (1)	NAIC (2)	∆(1)-(2) t-statistic	N1	N2	CCIIO (1)	NAIC (2)	∆(1)-(2) t-statistic	N1	N2
Life-years (mean)	19330.331	19550.351	-220.021	526	521	15598.370	15650.981	-52.611	606	589
			(3072.22)					(2533.62)		
Aggregated life- years (mean)	19330.331	19550.351	-220.021	526	521	23588.805	23848.090	-259.285	606	589
			(3072.22)					(2751.72)		
Premiums earned including state and federal high risk programs per life- year (mean)	2742.739	2719.217	23.522	526	521	3031.744	3126.418	-94.674	606	589
			(78.95)					(88.69)		
Incurred claims excluding prescription drugs per life-	2177.199	2149.904	27.296	526	521	2416.253	2447.177	-30.923	606	589
year(mean)			(81.27)					(96.44)		
Adjusted premiums earned per life-year (mean)	2651.366	2635.349	16.017	526	521	3268.669	2911.455	357.213	606	589
			(78.18)					(199.04)		
Expenses to improve patient safety and reduce medical errors per	15.953	15.322	0.631	526	521	19.132	18.879	0.253	605	589
life-year (mean)			(0.98)					(1.09)		
MLR (mean)	0.804	0.801	0.003	526	521	0.834	0.827	0.008	606	589

### Characteristics of Credible Matched Insurers - Individual Market

			(0.01)					(0.01)		
Credibility- adjusted MLR (mean)	0.855	0.842	0.013	526	521	0.882	0.864	0.018	606	589
(incuri)			(0.01)					(0.01)		
Partially-credible (proportion)	0.941	0.942	-0.001	526	521	0.906	0.907	-0.001	606	589
(proportion)			(0.01)					(0.02)		
Fully-credible (proportion)	0.059	0.058	0.001	526	521	0.094	0.093	0.001	606	589
			(0.01)					(0.02)		
Meets aggregation adjusted MLR (proportion)	0.485	0.478	0.007	526	519	0.507	0.512	-0.005	606	565
(proportion)			(0.03)					(0.03)		
Meets credibility adjusted MLR (proportion)	0.616	0.570	0.046	526	519	0.662	0.605	0.056*	606	565
(proportion)			(0.03)					(0.03)		
Sample N	1047					1195				

Notes: Data restricted to matched credible state-insurers in NAIC. Matched insurers are insurer-state observations identified in both NAIC and CCIIO data sets.

In NAIC credibility adjustment is accounted without average deductibles. Data are available up to Dec. 31 of the reporting year. In CCIIO credibility adjustment is accounted with average deductibles. Data are based on aggregated values up to Mar. 31 following the reporting year."

Standard error in parentheses. \*\*\* If p-value < 0.01. \*\* If p-value < 0.05. \* If p-value < 0.10.

Characteristics of Credible Matched Insurers - Small Group Market

Individual Market (2011 N 2,018; 2012 N 1,751)	CCIIO (1)	NAIC (2)	Δ(1)-(2) t-statistic	N1	N2	CCIIO (1)	NAIC (2)	Δ(1)-(2) t-statistic	N1	N2
Life-years (mean)	32288.938	32599.950	-311.012	525	529	26902.274	26984.782	-82.509	560	572
			(3803.64)					(3084.37)		
Aggregated life- years (mean)	32288.938	32599.950	-311.012	525	529	38490.520	38676.883	-186.363	560	572
			(3803.64)					(3306.23)		
Premiums earned including state and federal high risk programs per life- year (mean)	4223.420	4140.157	83.263	525	529	4375.375	4332.303	43.071	560	572
Incurred claims			(61.65)					(72.33)		
Incurred claims excluding prescription drugs per life-	3364.226	3300.553	63.672	525	529	3442.331	3369.948	72.383	560	572
year(mean)			(55.23)					(54.50)		
Adjusted premiums earned per life-year (mean)	4078.592	4014.963	63.630	525	529	4151.353	4064.250	87.104	560	572
			(60.06)					(62.41)		
Expenses to improve patient safety and reduce medical errors per	32.490	30.844	1.646	525	529	35.024	32.948	2.076	556	572
life-year (mean)			(1.51)					(1.52)		
MLR (mean)	0.834	0.833	0.001	525	529	0.851	0.839	0.012	560	572
			(0.01)					(0.01)		
Credibility- adjusted MLR (mean)	0.867	0.864	0.003	525	529	0.881	0.868	0.013	560	572
(incur)			(0.01)					(0.01)		

Partially-credible (proportion)	0.884	0.881	0.003	525	529	0.814	0.815	-0.000	560	572
(proportion)			(0.02)					(0.02)		
Fully-credible (proportion)	0.116	0.119	-0.003	525	529	0.186	0.185	0.000	560	572
			(0.02)					(0.02)		
Meets aggregation adjusted MLR (proportion)	0.640	0.645	-0.005	525	529	0.670	0.684	-0.014	560	569
(proportion)			(0.03)					(0.03)		
Meets credibility adjusted MLR (proportion)	0.804	0.769	0.034	525	529	0.800	0.780	0.020	560	569
(p. op of doily)			(0.03)					(0.02)		
Sample N	1054					1132				
Notes: Data restricte both NAIC and CCIIO In NAIC credibility ad In CCIIO credibility ac following the reporti Standard error in par	data sets. justment is ac djustment is ac ng year."	counted with counted with	out average a average de	deducti ductible	bles. D es. Data	ata are availat are based on	ble up to Dec. aggregated v	31 of the rep	porting	

## Characteristics of Credible Matched Insurers - Large Group Market

		Year	2011	Year 2012						
Individual Market (2011 N 2,018; 2012 N 1,751)	CCIIO (1)	NAIC (2)	Δ(1)-(2) t-statistic	N1	N2	CCIIO (1)	NAIC (2)	Δ(1)-(2) t-statistic	N1	N2

Life-years (mean)	71218.003	70456.105	761.898	557	564	58669.215	56857.326	1811.889	612	634
			(8832.43)					(7154.48)		
Aggregated life- years (mean)	71218.003	70456.105	761.898	557	564	72122.511	70650.288	1472.224	612	634
			(8832.43)					(7130.98)		
Premiums earned including state and federal high risk programs per life-year (mean)	4326.944	4225.406	101.537	557	564	4432.701	4316.325	116.376	612	634
			(61.34)					(96.15)		
Incurred claims excluding prescription drugs per life-	3659.454	3560.055	99.398	557	564	3707.660	3540.891	166.769**	612	63
year(mean)			(57.04)					(59.79)		
Adjusted premiums earned per life-year (mean)	4205.068	4110.281	94.787	557	564	4257.552	4074.510	183.042**	612	63
			(60.00)					(65.58)		
Expenses to improve patient safety and reduce medical errors per life-year	35.176	33.780	1.397	557	564	37.376	34.646	2.729*	608	63
(mean)			(1.29)					(1.26)		
MLR (mean)	0.878	0.874	0.005	557	564	0.883	0.876	0.007	611	63
			(0.01)					(0.01)		
Credibility- adjusted MLR (mean)	0.903	0.898	0.005	557	564	0.906	0.899	0.007	612	63
נוויבמוו)			(0.01)					(0.01)		
Partially-credible (proportion)	0.763	0.766	-0.003	557	564	0.690	0.694	-0.004	612	63

			(0.03)					(0.03)		
Fully-credible (proportion)	0.237	0.234	0.003	557	564	0.310	0.306	0.004	612	634
(proportion)			(0.03)					(0.03)		
Meets aggregation adjusted MLR (proportion)	0.677	0.663	0.014	557	564	0.692	0.683	0.009	611	625
(proportion)			(0.03)					(0.03)		
Meets credibility adjusted MLR (proportion)	0.815	0.782	0.033	557	564	0.815	0.798	0.017	611	625
(p. op of d. of )			(0.02)					(0.02)		
Sample N	1121					1246				

Notes: Data restricted to matched credible state-insurers in NAIC. Matched insurers are insurer-state observations identified in both NAIC and CCIIO data sets.

In NAIC credibility adjustment is accounted without average deductibles. Data are available up to Dec. 31 of the reporting year. In CCIIO credibility adjustment is accounted with average deductibles. Data are based on aggregated values up to Mar. 31 following the reporting year."

Standard error in parentheses. \*\*\* If p-value < 0.01. \*\* If p-value < 0.05. \* If p-value < 0.10.