

**Supplementary Table 3.** Results of sensitivity analysis in various definitions of poor medication adherence

Income level	Adjusted HR	p-value	Income level	Adjusted HR	p-value
When Good CMA is defined as CMA $\geq$ 70%			When Good CMA is defined as CMA $\geq$ 80%		
Age < 50			Age < 50		
High income	Reference		High income	Reference	
Middle income: natural direct effect	1.22 (1.03-1.45)	0.02	Middle income: natural direct effect	1.24 (1.04-1.47)	0.01
Low income: natural direct effect	1.59 (1.34-1.88)	< 0.01	Low income: natural direct effect	1.61 (1.35-1.91)	< 0.01
Medical Aid beneficiaries: natural direct effect	2.59 (2.09-3.21)	< 0.01	Medical Aid beneficiaries: natural direct effect	2.60 (2.10-3.23)	< 0.01
Middle income: natural indirect effect	1.01 (0.85-1.21)	0.90	Middle income: natural indirect effect	1.01 (0.85-1.21)	0.88
Low income: natural indirect effect	1.03 (0.86-1.22)	0.78	Low income: natural indirect effect	1.03 (0.86-1.23)	0.75
Medical Aid beneficiaries: natural indirect effect	1.03 (0.86-1.22)	0.78	Medical Aid beneficiaries: natural indirect effect	1.02 (0.86-1.22)	0.81
Age $\geq$ 50			Age $\geq$ 50		
High income	Reference		High income	Reference	
Middle income: natural direct effect	1.22 (1.12-1.32)	< 0.01	Middle income: natural direct effect	1.22 (1.12-1.32)	< 0.01
Low income: natural direct effect	1.25 (1.16-1.36)	< 0.01	Low income: natural direct effect	1.26 (1.16-1.36)	< 0.01
Medical Aid beneficiaries: natural direct effect	1.95 (1.79-2.13)	< 0.01	Medical Aid beneficiaries: natural direct effect	1.96 (1.80-2.14)	< 0.01
Middle income: natural indirect effect	1 (0.92-1.08)	0.99	Middle income: natural indirect effect	1.00 (0.92-1.08)	0.97
Low income: natural indirect effect	0.99 (0.92-1.08)	0.88	Low income: natural indirect effect	0.99 (0.91-1.07)	0.80
Medical Aid beneficiaries: natural indirect effect	0.99 (0.91-1.07)	0.80	Medical Aid beneficiaries: natural indirect effect	0.98 (0.90-1.06)	0.61
When Good CMA is defined as CMA $\geq$ 75%			When Good CMA is defined as CMA $\geq$ 90%		
Age < 50			Age < 50		
High income	Reference		High income	Reference	
Middle income: natural direct effect	1.22 (1.03-1.45)	0.02	Middle income: natural direct effect	1.24 (1.05-1.48)	0.01
Low income: natural direct effect	1.59 (1.34-1.89)	< 0.01	Low income: natural direct effect	1.64 (1.38-1.95)	< 0.01
Medical Aid beneficiaries: natural direct effect	2.59 (2.09-3.21)	< 0.01	Medical Aid beneficiaries: natural direct effect	2.60 (2.10-3.23)	< 0.01
Middle income: natural indirect effect	1.01 (0.85-1.21)	0.90	Middle income: natural indirect effect	1.01 (0.84-1.20)	0.95
Low income: natural indirect effect	1.03 (0.86-1.22)	0.79	Low income: natural indirect effect	1.01 (0.85-1.21)	0.89
Medical Aid beneficiaries: natural indirect effect	1.02 (0.86-1.22)	0.81	Medical Aid beneficiaries: natural indirect effect	1.01 (0.85-1.21)	0.90
Age $\geq$ 50			Age $\geq$ 50		
High income	Reference		High income	Reference	
Middle income: natural direct effect	1.22 (1.03-1.45)	0.02	Middle income: natural direct effect	1.22 (1.13-1.32)	< 0.01
Low income: natural direct effect	1.59 (1.34-1.89)	< 0.01	Low income: natural direct effect	1.25 (1.16-1.36)	< 0.01
Medical Aid beneficiaries: natural direct effect	2.59 (2.09-3.21)	< 0.01	Medical Aid beneficiaries: natural direct effect	1.94 (1.78-2.12)	< 0.01
Middle income: natural indirect effect	1.01 (0.85-1.21)	0.90	Middle income: natural indirect effect	1.00 (0.92-1.08)	0.98
Low income: natural indirect effect	1.03 (0.86-1.22)	0.79	Low income: natural indirect effect	0.99 (0.92-1.08)	0.85
Medical Aid beneficiaries: natural indirect effect	1.02 (0.86-1.22)	0.81	Medical Aid beneficiaries: natural indirect effect	0.99 (0.91-1.07)	0.73

HR, hazard ratio; CI, confidence interval.