

Appendix 1 (as supplied by the authors): Model parameters, distributions used in probabilistic analyses and data sources

Variable	Model value	Distribution	Source
SHORT-TERM MODEL VARIABLES			
Proportion of screened individuals testing positive for AF on single lead ECG	0.024	beta ($\alpha=27$, $\beta=1118$)	1
Positive predictive value of single lead ECG	0.654	beta ($\alpha=50$, $\beta=27$)	Russell Quinn, University of Calgary, Personal Communication
Proportion of confirmed AF that receive an OAC	0.71	beta ($\alpha=5$, $\beta=2$)	1
Cost per 12 lead ECG	\$11.05	gamma ($\alpha=25$, $\beta=0.44$)	2
Cost per 24 hour Holter Monitor	\$104.50	gamma ($\alpha=25$, $\beta=4.18$)	2
LONG-TERM MODEL VARIABLES			
Annual risk of event in absence of OAC			
Ischemic stroke (CHA ₂ DS ₂ -VASc = 3.2)	0.048	beta ($\alpha=85$, $\beta=1683$)	3
ICH without OAC (HAS-BLED = 2.18)	0.006	beta ($\alpha=201$, $\beta=33285$)	3
Major bleed (non-ICH) (HAS-BLED = 2.18)	0.023	beta ($\alpha=770$, $\beta=32715$)	3
Relative risk of events: warfarin vs. no OAC			
RR ischemic stroke	0.33	lognormal ($\mu=-1.1$, $\sigma=0.24$)	4
RR major bleeding	2.2	lognormal ($\mu=0.80$, $\sigma=0.47$)	4
Relative risk of events: DOAC vs. warfarin			
RR ischemic stroke	0.92	lognormal ($\mu=-0.08$, $\sigma=0.05$)	5
RR hemorrhagic stroke	0.49	lognormal ($\mu=0.71$, $\sigma=0.13$)	5
RR ICH (non-hemorrhagic stroke)	0.46	lognormal ($\mu=-0.79$, $\sigma=0.16$)	5
RR major bleed (non-ICH)	0.97	lognormal ($\mu=-0.03$, $\sigma=0.04$)	5
Proportion of OACs prescribed that are DOACs	0.48	beta ($\alpha=366$, $\beta=416$)	6
Relative risk of events: DOAC vs. no OAC			
RR ischemic stroke	0.3	Determined by other variables	Indirect: 4,5
RR hemorrhagic stroke	1.09	Determined by other variables	Indirect: 4,5
RR ICH (non-hemorrhagic)	1.01	Determined by other variables	Indirect: 4,5

stroke)				
RR major bleed (non-ICH)	2.15	Determined by other variables	Indirect: 4,5	
Annual OAC costs				
DOAC (average of dabigatran, rivaroxaban, apixaban)	\$1,271.65	Fixed	7	
Warfarin	\$24.63	Fixed	7	
INR testing with warfarin	\$247.76	gamma ($\alpha=25$, $\beta=9.91$)	8	
Annual event costs				
Ischemic stroke 1st year	\$57,024	gamma ($\alpha=25$, $\beta=2281$)	9	
Ischemic stroke 2nd+ years	\$7,085	gamma ($\alpha=25$, $\beta=283$)	10	
ICH 1st year	\$67,386	gamma ($\alpha=25$, $\beta=2695$)	11	
ICH 2nd+ years	\$6,087	gamma ($\alpha=25$, $\beta=244$)	10	
Major bleed (non-ICH)	\$4,870	gamma ($\alpha=25$, $\beta=195$)	12	
Utility variables				
General population males aged 75+	0.75	beta ($\alpha=193$, $\beta=64$)	13	
General population females aged 75+	0.71	beta ($\alpha=412$, $\beta=168$)	13	
Proportion stroke with mRS 3-5	0.45	beta ($\alpha=208$, $\beta=259$)	14	
Utility weight mRS 0-2	0.81	beta ($\alpha=1128$, $\beta=256$)	15	
Utility weight mRS 3-5	0.34	beta ($\alpha=45$, $\beta=86$)	15	
Utility weight stroke	0.6	Determined by other variables	Indirect: 14, 15	
Mortality				
Annual general population	varies by age and gender	Fixed	16,17	
1 year following ischemic stroke	0.37	beta ($\alpha=1027$, $\beta=1726$)	18	
1 year following ICH	0.35	beta ($\alpha=806$, $\beta=1484$)	19	
RR of death vs. general population 2+ year's post stroke	2.3	lognormal ($\mu=-0.83$, $\sigma=0.16$)	20	
Major bleed (non-ICH)	0.074	beta ($\alpha=4870$, $\beta=60940$)	21	
Abbreviations: AF = Atrial Fibrillation, ECG = electrocardiogram, OAC = oral anticoagulants, ICH = intracranial hemorrhage, RR = relative risk, DOAC = direct oral anticoagulants, INR = international normalised ratio, mRS = modified Rankin Scale				

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