

## **SUPPLEMENTAL MATERIAL**

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Table S1. Hospital Sampling Frame of CCC-AF

Territories <sup>&amp;</sup>	GDP per capital <sup>*</sup>	Provinces	No. of hospitals in the area <sup>#</sup>	No. of hospitals needed (10%)	Enrolled hospitals in Phase 1	Enrolled hospitals in Phase 2
Northern China	Low	NA	--	--	--	--
	Medium-low	Shanxi	49	5	4	1
	Medium-high	Hebei	55	5	4	2
	High	Beijing, Tianjin, Inner Mongolia	123	12	13	1
Northeast China	Low	NA	--	--	--	--
	Medium-low	Heilongjiang	77	7	1	5
	Medium-high	Jilin	39	4	2	1
	High	Liaoning	101	10	2	9
Eastern China	Low	Anhui, Jiangxi	84	8	3	5
	Medium-low	NA	--	--	--	--
	Medium-high	Fujian, Shandong	129	12	1	12
	High	Shanghai, Jiangsu, Zhejiang	240	23	13	11
Central China	Low	NA	--	--	--	--
	Medium-low	Henan, Hunan	134	13	7	7
	Medium-high	Hubei	60	6	0	5
	High	NA	--	--	--	--
Southern China	Low	Guangxi	50	5	2	2
	Medium-low	Hainan	11	1	2	0
	Medium-high	NA	--	--	--	--
	High	Guangdong	105	10	5	4
Southwest China	Low	Guizhou, Yunnan, Tibet	82	8	3	2
	Medium-low	Sichuan	83	8	0	5
	Medium-high	Chongqing	22	2	3	0
	High	NA	--	--	--	--
Western China	Low	Gansu	34	3	2	0
	Medium-low	Qinghai, Xinjiang	29	3	5	0
	Medium-high	Shaanxi, Ningxia	51	5	3	3
	High	NA	--	--	--	--
<b>Total</b>			<b>1558</b>	<b>150</b>	<b>75</b>	<b>75</b>

<sup>&</sup>Mainland China includes seven geographical regions: Northern, Northeast, Eastern, Central, Southern, Southwest, and Western China. <sup>\*</sup>GDP per capital is from National Bureau of Statistical, provinces are grouped into quadruplets according to GDP per capital, low:<29608.00 RMB, medium-low: 29608.00-36393.00 RMB, medium-high: 36394.00-54095.00 RMB, high: >54095.00 RMB.

<sup>#</sup>Numbers of hospitals are from China Statistical Yearbook 2013.

**Table S2. List of Hospitals for Phase One**

Hospitals	Territories	Provinces	City	Investigator
Shanxi Cardiovascular Hospital	Northern China	Shanxi	Taiyuan	Bao Li
Nanjing Drum Tower Hospital, The Affiliated Hospital of Nanjing University Medical School	Eastern China	Jiangsu	Nanjing	Biao Xu, Guangshu Han
Hainan General Hospital	Southern China	Hainan	Haikou	Bin Li
The Second Hospital of Jilin University	Northeast China	Jilin	Changchun	Bin Liu
The 2nd Affiliated Hospital of Harbin Medical University	Northeast China	Heilongjiang	Harbin	Bo Yu
The Ninth Hospital Affiliated to Shanghai Jiaotong University School of Medicine	Eastern China	Shanghai	Shanghai	Changqian Wang
Henan Provincial People's Hospital	Central China	Henan	Zhengzhou	ChuanYu Gao
Shanxi Provincial People's Hospital	Northern China	Shanxi	Taiyuan	Chunlin Lai
Xinqiao Hospital, Third Military Medical University	Southwest China	Chongqing	Chongqing	Cui Bin, Lan Huang
China Meitan General Hospital	Northern China	Beijing	Beijing	Di Wu
The 309th Hospital of Chinese People's Liberation Army	Northern China	Beijing	Beijing	Fakuan Tang, Jun Xiao
Zhongda Hospital, Southeast University	Eastern China	Jiangsu	Nanjing	Genshan Ma
The First Affiliated Hospital of Liaoning Medical University	Northeast China	Liaoning	Jinzhou	Guizhou Tao
Xinjiang Uygur Autonomous Region People's Hospital	Northwest China	Xinjiang	Urumchi	Guoqing Li
Sir Run Run Shaw Hospital, College of Medicine, Zhejiang University	Eastern China	Zhejiang	Hangzhou	Guosheng Fu
Beijing Friendship Hospital, Capital Medical University	Northern China	Beijing	Beijing	Hongwei Li
The First Affiliated Hospital of Bengbu Medical College	Eastern China	Anhui	Bengbu	Honhju Wang
General Hospital of TISCO	Northern China	Shanxi	Taiyuan	Huifeng Wang

Hospitals	Territories	Provinces	City	Investigator
Dongguan People's Hospital	Southern China	Guangdong	Dongguan	Jianfeng Ye
Panyu Hospital of Chinese Medicine	Southern China	Guangdong	Guangzhou	Jianhao Li
Peking University First Hospital	Northern China	Beijing	Beijing	Jie Jiang
Sun Yat-sen Memorial Hospital, Sun Yat-sen University	Southern China	Guangdong	Guangzhou	Jingfeng Wang
Guangdong General Hospital	Southern China	Guangdong	Guangzhou	Jiyan Chen
Hospital of Xinjiang Production & Construction Corps	Northwest China	Xinjiang	Urumchi	Junming Liu
The Military General Hospital of Beijing PLA	Northern China	Beijing	Beijing	Junxia Li
The First Affiliated Hospital of Guangxi Medical University	Southern China	Guangxi	Nanning	Lang Li
Tongren Hospital Affiliated to Shanghai Jiaotong University School of Medicine	Eastern China	Shanghai	Shanghai	Li Jiang
Binzhou City Center Hospital	Eastern China	Shandong	Binzhou	Lijun Meng
The First Affiliated Hospital of Zhengzhou University	Central China	Henan	Zhengzhou	Ling Li
Xijing Hospital	Northwest China	Shaanxi	Xi'an	Ling Tao
The Affiliated Hospital of Guizhou Medical University	Southwest China	Guizhou	Guiyang	Lirong Wu
First Affiliated Hospital of the People's Liberation Army General Hospital	Northern China	Beijing	Beijing	Miao Tian
The Second People's Hospital of Yunnan Province	Southwest China	Yunnan	Kunming	Minghua Han
Haikou People's Hospital	Southern China	Hainan	Haikou	Moshui Chen
Gansu Provincial Hospital	Northwest China	Gansu	Lanzhou	Ping Xie
The First Affiliated Hospital of Henan University of Science and Technology	Central China	Henan	Luoyang	Pingshuan Dong
Chenzhou First People's Hospital	Central China	Hunan	Chenzhou	Qiaoqing Zhong
People's Hospital of Qinghai Province	Northwest China	Qinghai	Xining	Rong Chang

Hospitals	Territories	Provinces	City	Investigator
Affiliated Hospital of Ningxia Medical University	Northwest China	Ningxia	Yinchuan	Shaobin Jia
Beijing Anzhen Hospital, Capital Medical University	Northern China	Beijing	Beijing	Shaoping Nie, Xiaohui Liu
North Jiangsu People's Hospital	Eastern China	Jiangsu	Yangzhou	Shenghu He
Shanghai Sixth People's Hospital	Eastern China	Shanghai	Shanghai	Shixin Ma
The First Hospital of Handan	Northern China	Hebei	Handan	Shuanli Xin
Huai'an First People's Hospital	Eastern China	Jiangsu	Huai'an	Shuren Ma
The First Affiliated Hospital of Chongqing Medical University	Southwest China	Chongqing	Chongqing	Suxin Luo
Navy General Hospital	Northern China	Beijing	Beijing	Tianchang Li
Zhejiang Provincial Hospital of TCM	Eastern China	Zhejiang	Hangzhou	Wei Mao
The Third Xiangya Hospital of Central South University	Central China	Hunan	Changsha	Weihong Jiang
Affiliated Hospital of Qinghai University	Northwest China	Qinghai	Xining	Weijun Liu
Teda International Cardiovascular Hospital	Northern China	Tianjin	Tianjin	Wenhua Lin
The Second Hospital of Hebei Medical University	Northern China	Hebei	Shijiazhuang	Xianghua Fu
Changhai Hospital of Shanghai	Eastern China	Shanghai	Shanghai	Xianxian Zhao
The Second Affiliated Hospital to Nanchang University	Eastern China	Jiangxi	Nanchang	Xiaoshu Cheng
Hebei General Hospital	Northern China	Hebei	Shijiazhuang	Xiaoyong Qi
Inner Mongolia People's Hospital	Northern China	Inner Mongolia	Hohhot	Xingsheng Zhao
The General Hospital of Shenyang Military Region	Northeast China	Liaoning	Shenyang	Yaling Han
The First Hospital of Jilin University	Northeast China	Jilin	Changchun	Yang Zheng
Tianjin Chest Hospital	Northern China	Tianjin	Tianjin	Yin Liu
Hunan Provincial People's Hospital	Central China	Hunan	Changsha	Ying Guo

Hospitals	Territories	Provinces	City	Investigator
People's Hospital of Yuxi City	Southwest China	Yunnan	Yuxi	Yinglu Hao
The People's Hospital of Guangxi Zhuang Autonomous Region	Southern China	Guangxi	Nanning	Yingzhong Lin
The First Teaching Hospital of Xinjiang Medical University	Northwest China	Xinjiang	Urumchi	Yitong Ma
Baogang Hospital	Northern China	Inner Mongolia	Baotou	Yongdong Li
Tianjin Medical University General Hospital	Northern China	Tianjin	Tianjin	Yuemin Sun
The Second Affiliated Hospital of Zhengzhou University	Central China	Henan	Zhengzhou	Yulan Zhao
Nanfang Hospital of Southern Medical University	Southern China	Guangdong	Guangzhou	Yuqing Hou
The First Affiliated Hospital to Nanchang University	Eastern China	Jiangxi	Nanchang	Zeqi Zheng
The First Affiliated Hospital of Lanzhou University	Northwest China	Gansu	Lanzhou	Zheng Zhang
The Third Hospital of Shijiazhuang	Northern China	Hebei	Shijiazhuang	Zhenguo Ji
Wuxi People's Hospital	Eastern China	Jiangsu	Wuxi	Zhenyu Yang
Jiangsu Province Hospital	Eastern China	Jiangsu	Nanjing	Zhijian Yang
The Second Hospital of Shanxi Medical University	Northern China	Shanxi	Taiyuan	Zhiming Yang
The Affiliated Hospital of Xuzhou Medical College	Eastern China	Jiangsu	Xuzhou	Zhirong Wang
Southwest Hospital, Third Military Medical University	Southwest China	Chongqing	Chongqing	Zhiyuan Song
The First Affiliated Hospital of Xi'an Jiaotong University	Northwest China	Shaanxi	Xi'an	Zuyi Yuan

**Table S3. List of Hospitals for Phase Two**

Hospitals	Territories	Provinces	City	Investigator
Yangzhou First People's Hospital	Eastern China	Jiangsu	Yangzhou	Aihua Li
Hospital 463 of Chinese People's Liberation Army	Northeast China	Liaoning	Shenyang	Bosong Yang
The Central Hospital of Mianyang	Northwest China	Sichuan	Mianyang	Caidong Luo
Liaocheng People's Hospital	Eastern China	Shandong	Liaocheng	Chunyan Zhang
Yancheng Third People's Hospital	Eastern China	Jiangsu	Yancheng	Chunyang Wu
The Second Xiangya Hospital of Central South University	Central China	Hunan	Changsha	Daoquan Peng
The Central Hospital of Panzhihua	Northwest China	Sichuan	Panzhihua	Dawen Xu
The First Hospital of Qiqihaer City	Northeast China	Heilongjiang	Qiqihaer	Gang Xu
The Third the People's Hospital of Bengbu	Eastern China	Anhui	Bengbu	Gengsheng Sang
The First Hospital of Jiamusi	Northeast China	Heilongjiang	Jiamusi	Guixia Zhang
Zhoushan People's Hospital	Eastern China	Zhejiang	Zhoushan	Guoxiong Chen
Dalian Municipal Central Hospital	Northeast China	Liaoning	Dalian	Hailong Lin
Renmin Hospital of Wuhan University	Central China	Hubei	Wuhan	Hong Jiang
Ningxia People's Hospital	Northwest China	Ningxia	Yinchuan	Hong Luan
The First People's Hospital of Yunnan Province (Kunhua Hospital)	Northwest China	Yunnan	Kunming	Hong Zhang
The Central Hospital of Zhoukou	Central China	Henan	Zhoukou	Hualing Liu
Anyang District Hospital	Central China	Henan	Anyang	Hui Liu
Sichuan Provincial People's Hospital	Northwest China	Sichuan	Chengdu	Jianhong Tao
Mudanjiang Cardiovascular Disease Hospital	Northeast China	Heilongjiang	Mudanjiang	Jianwen Liu
Yichang Central Hospital	Central China	Hubei	Yichang	Jiawang Ding
Qilu Hospital of Shandong	Eastern China	Shandong	Jinan	Jifu Li

Hospitals	Territories	Provinces	City	Investigator
University				
Affiliated Hospital of Jiangsu University	Eastern China	Jiangsu	Zhenjiang	Jinchuan Yan
The First People's Hospital of Nanning City	Southern China	Guangxi	Nanning	Jinru Wei
The First Affiliated Hospital of Fujian Medical University	Eastern China	Fujian	Fuzhou	Jinzi Su
Chengdu Third People's Hospital	Northwest China	Sichuan	Chengdu	Jiong Tang
Yantai hospital	Eastern China	Shandong	Yantai	Juexin Fan
Qingdao Municipal Hospital	Eastern China	Shandong	Qingdao	Jun Guan
Zhongshan Hospital Affiliated to Fudan University	Eastern China	Shanghai	Shanghai	Junbo Ge
Longyan First Hospital	Eastern China	Fujian	Longyan	Kaihong Chen
Affiliated Hospital of Guangdong Medical College	Southern China	Guangdong	Guangzhou	Keng Wu
Jiangxi Provincial People's Hospital	Eastern China	Jiangxi	Nanchang	Lang Ji
Anhui Provincial Hospital	Eastern China	Anhui	Hefei	Likun Ma
Xiangtan City Central Hospital	Central China	Hunan	Xiangtan	Lilong Tang
The First Hospital of Haerbin City	Northeast China	Heilongjiang	Harbin	Lin Wei
Central Hospital Affiliated to Shenyang Medical College	Northeast China	Liaoning	Shenyang	Man Zhang, Kaiming Chen
The Central Hospital of Wuhan	Central China	Hubei	Wuhan	Manhua Chen
Hangzhou First People's Hospital	Eastern China	Zhejiang	Hangzhou	Ningfu Wang
The Central Hospital of Xuzhou	Eastern China	Jiangsu	Xuzhou	Peiying Zhang
The Second hospital of Dalian Medical University	Northeast China	Liaoning	Dalian	Peng Qu
The First Affiliated Hospital of Liaoning University of Traditional Chinese Medicine	Northeast China	Liaoning	Shenyang	Ping Hou
Beijing Tsinghua Changgung Hospital	Northern China	Beijing	Beijing	Ping Zhang
Guizhou Provincial People's Hospital	Northwest China	Guizhou	Guiyang	Qiang Wu



Hospitals	Territories	Provinces	City	Investigator
The First Affiliated Hospital of Xiamen University	Eastern China	Fujian	Xiamen	Qiang Xie
Quanzhou First Hospital	Eastern China	Fujian	Quanzhou	Rong Lin
Wuzhou People's Hospital	Southern China	Guangxi	Wuzhou	Shaowu Ye
The Central Hospital of Jilin	Northeast China	Jilin	Changchun	Shuangbin Li
Xiangya Hospital Central South University	Central China	Hunan	Changsha	Tianlun Yang
Guangzhou Red Cross Hospital	Southern China	Guangdong	Guangzhou	Tongguo Wu
The First Affiliated Hospital of Guangzhou Medical College	Southern China	Guangdong	Guangzhou	Wei Wang
The First Affiliated Hospital of Wenzhou Medical University	Eastern China	Zhejiang	Wenzhou	Weijian Huang
The Second Affiliated Hospital of Soochow University	Eastern China	Jiangsu	Suzhou	Weiting Xu
Wuhan Asia Heart Hospital	Central China	Hubei	Wuhan	Xi Su
The First Affiliated Hospital of Soochow University	Eastern China	Jiangsu	Suzhou	Xiangjun Yang
Affiliated Hospital of Yan'an University	Northwest China	Shaanxi	Yan'an	Xiaochuan Ma
The First People's Hospital of Jining	Eastern China	Shandong	Jining	Xiaofei Sun
The Central Hospital of Taiyuan	Northern China	Shanxi	Taiyuan	Xiaoping Chen
West China Hospital of Sichuan University	Northwest China	Sichuan	Chengdu	Xiaoping Chen
The Third Affiliated Hospital of Guangzhou Medical College	Southern China	Guangdong	Guangzhou	Ximing Chen
The First Affiliated Hospital of Wannan Medical College	Eastern China	Anhui	Wuhu	Xingsheng Tang
Tangdu Hospital of The Fourth Military Medical University	Northwest China	Shaanxi	Xi'an	Xue Li
Shanghai East Hospital Affiliated to Tongji University	Eastern China	Shanghai	Shanghai	Xuebo Liu
Xiamen Cardiovascular Disease Hospital	Eastern China	Fujian	Xiamen	Yan Wang

Hospitals	Territories	Provinces	City	Investigator
Zhongnan hospital of Wuhan University	Central China	Hubei	Wuhan	Yanggan Wang
Fujian Provincial Hospital	Eastern China	Fujian	Fuzhou	Yansong Guo
The First Affiliated hospital of Dalian Medical University	Northeast China	Liaoning	Dalian	Yanzong Yang
The First People's Hospital of Changde	Central China	Hunan	Changde	Yi Huang
The First Affiliated Hospital of China Medical University	Northeast China	Liaoning	Shenyang	Yingxian Sun
The Fourth Affiliated Hospital of China Medical University	Northeast China	Liaoning	Shenyang	Yuanzhe Jin
Cangzhou Central Hospital	Northern China	Hebei	Cangzhou	Zesheng Xu
The Central Hospital of Shaoyang	Central China	Hunan	Shaoyang	Zewei Ouyang
The People's Hospital of Liaoning Province	Northeast China	Liaoning	Shenyang	Zhanquan Li
The First Affiliated Hospital of Jiamusi University	Northeast China	Heilongjiang	Jiamusi	Zhaofa He
Tangshan Gongren Hospital	Northern China	Hebei	Tangshan	Zheng Ji
Huaibei Miners General Hospital	Eastern China	Anhui	Huaibei	Zhenqi Su
Linyi People's Hospital	Eastern China	Shandong	Linyi	Zhihong Ou

**Table S4. Case Report Form of CCC-AF**

**Improving Care for Cardiovascular Disease in China :**  
**A collaborative project of AHA and CSC**  
**Atrial Firbrillation-CRF**

<b>A. Demographics</b>			
Name: _____	Sex : <input type="radio"/> Male <input type="radio"/> Female	Date of Birth: _____	
Medical Record ID: _____	Personal ID: _____ <input type="radio"/> Unknown	Other ID: _____	
Tel.: _____	Relationship of Contact Person with Patient: _____	Name of Contact Person: _____	
Tel. of the contact person: _____	Ethnic Group: <input type="radio"/> Han <input type="radio"/> Manchu <input type="radio"/> Zhuang <input type="radio"/> Hui <input type="radio"/> Mongol <input type="radio"/> Uyghur <input type="radio"/> Kazak <input type="radio"/> Other		
Address: ___Province___City___District___Street___No. <input type="radio"/> Unknown		Zip code: _____ <input type="radio"/> Unknown	
Education: <input type="radio"/> Primary school or below <input type="radio"/> Middle school <input type="radio"/> High school <input type="radio"/> University/college undergraduate <input type="radio"/> Master's degree or above <input type="radio"/> Unknown			
Occupation: <input type="radio"/> Managerial, administrative or official <input type="radio"/> Professional and technical <input type="radio"/> Service <input type="radio"/> Agriculture <input type="radio"/> Manufacturing <input type="radio"/> Retired <input type="radio"/> Unemployed <input type="radio"/> Others			
Marriage Status : <input type="radio"/> Single <input type="radio"/> Married <input type="radio"/> Divorced <input type="radio"/> Widowed <input type="radio"/> Other			
<b>Medical Insurance:</b> <input type="radio"/> Urban employees-basic medical insurance <input type="radio"/> Urban residents - basic medical insurance <input type="radio"/> New rural cooperative medical insurance <input type="radio"/> Commercial medical insurance <input type="radio"/> Full government-paying <input type="radio"/> Self-paying <input type="radio"/> Other medical insurance <input type="radio"/> Other			
<b>B. Arrival and Admission Information</b>			
Department: <input type="radio"/> Cardiology <input type="radio"/> Internal medicine <input type="radio"/> Other: _____		Ward Number: _____	Doctor in Charge: _____
<b>Arrival Date and Time:</b> ___/___/_____: ____ <input type="radio"/> MM/DD/YYYY only <input type="radio"/> Unknown			
<b>Admit Date:</b> ___/___/_____		Intra-hospital transportation: <input type="radio"/> No <input type="radio"/> Yes	
Point of Origin for Admission or Visit: <input type="radio"/> Clinic <input type="radio"/> Emergency room <input type="radio"/> Transferred from another hospital <input type="radio"/> Unknown			
<b>C. Medical History</b>			
<b>Medical History</b> <b>(Select all that apply)</b>	<input type="checkbox"/> None <input type="checkbox"/> Smoker <input type="checkbox"/> Alcohol use <input type="checkbox"/> Hypertension history <input type="checkbox"/> Uncontrolled, SBP > 160 mmHg <input type="checkbox"/> Diabetes <input type="checkbox"/> Coronary artery disease <input type="checkbox"/> Prior MI <input type="checkbox"/> Prior PCI <input type="checkbox"/> Bare metal stent <input type="checkbox"/> Drug eluting stent <input type="checkbox"/> CRT-D (cardiac resynchronization therapy w/ICD) <input type="checkbox"/> CRT-P (cardiac resynchronization therapy-pacing only) <input type="checkbox"/> Pacemaker <input type="checkbox"/> Sinus node dysfunction/ sick sinus syndrome <input type="checkbox"/> LAA occlusion device	<input type="checkbox"/> Heart failure <input type="checkbox"/> Family history of AF <input type="checkbox"/> Cardiac transplantation <input type="checkbox"/> Cardiomyopathy <input type="checkbox"/> Ischemic <input type="checkbox"/> Non-Ischemic <input type="checkbox"/> Rheumatic heart disease <input type="checkbox"/> Mechanical prosthetic heart valve <input type="checkbox"/> Mitral stenosis <input type="checkbox"/> CVA/TIA <input type="checkbox"/> Ischemic stroke <input type="checkbox"/> ICH <input type="checkbox"/> TIA <input type="checkbox"/> Cognitive impairment <input type="checkbox"/> Depression <input type="checkbox"/> Peripheral arterial disease <input type="checkbox"/> Deep vein thrombosis <input type="checkbox"/> Pulmonary embolism	<input type="checkbox"/> Upper gastrointestinal hemorrhage <input type="checkbox"/> Gastrointestinal <input type="checkbox"/> Other <input type="checkbox"/> Obstructive sleep apnea <input type="radio"/> CPAP <input type="checkbox"/> COPD <input type="checkbox"/> Renal Disease <input type="checkbox"/> Dialysis <input type="checkbox"/> Transplant <input type="checkbox"/> Cr >2.6 mg/dL or >200, μmol/L <input type="checkbox"/> Liver disease (Cirrhosis, Bilirubin >2x Normal, AST/ALT/AP >3x Normal) <input type="checkbox"/> Thyroid Disease <input type="checkbox"/> Hyperthyroidism <input type="checkbox"/> Hypothyroidism <input type="checkbox"/> Anemia <input type="checkbox"/> Cancer <input type="checkbox"/> Prior major bleeding or predisposition to bleeding (bleeding diathesis, anemia, etc.)

Labile INR?  Yes  No  Unknown

Prior AF Procedures  None  Cardioversion  Ablation  AF surgery (Surgical MAZE)

**D. Diagnosis**

<b>Atrial Arrhythmia Type</b>	<input type="checkbox"/> Valvular atrial fibrillation <input type="checkbox"/> Nonvalvular atrial fibrillation <input type="checkbox"/> Atrial flutter If Atrial Fibrillation: <input type="radio"/> First detected atrial fibrillation <input type="radio"/> Paroxysmal atrial fibrillation <input type="radio"/> Persistent atrial fibrillation (If Persistent Atrial Fibrillation, the type of your first detected atrial fibrillation is: <input type="radio"/> Paroxysmal atrial fibrillation <input type="radio"/> Persistent atrial fibrillation) <input type="radio"/> Permanent/long standing persistent atrial fibrillation <input type="radio"/> Unknown If Atrial Flutter: <input type="radio"/> Typical atrial flutter <input type="radio"/> Atypical atrial flutter <input type="radio"/> Unknown
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<b>Was Atrial Fibrillation/Flutter the patient's primary diagnosis?</b>	<input type="radio"/> No	<input type="radio"/> Yes
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<b>If not, what was the patient's primary diagnosis?</b>	<input type="radio"/> Acute MI <input type="radio"/> Heart Failure	<input type="radio"/> Surgery <input type="radio"/> COPD	<input type="radio"/> CVA/TIA <input type="radio"/> Other
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<b>Were any of the following first detected on this admission?</b>	<input type="checkbox"/> None <input type="checkbox"/> Acute MI <input type="checkbox"/> Coronary artery disease <input type="checkbox"/> Diabetes	<input type="checkbox"/> Heart failure <input type="checkbox"/> Liver disease <input type="checkbox"/> Mitral stenosis <input type="checkbox"/> Peripheral arterial disease	<input type="checkbox"/> Ischemic stroke <input type="checkbox"/> ICH <input type="checkbox"/> TIA <input type="checkbox"/> Pulmonary embolism
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**E. Medications at Admission**

<b>Medications Used Prior to Admission</b> (Select all that apply)	<input type="checkbox"/> Patient on no meds prior to admission <input type="checkbox"/> Beta blocker Beta blocker was used for <input type="checkbox"/> Heart failure <input type="checkbox"/> Antihypertension <input type="checkbox"/> Arrhythmia <input type="checkbox"/> Ca channel blocker <input type="radio"/> Dihydropyridine <input type="radio"/> Non-dihydropyridine <input type="checkbox"/> Antiarrhythmic <input type="checkbox"/> Amiodarone <input type="checkbox"/> Dofetilide <input type="checkbox"/> Dronedarone <input type="checkbox"/> Flecainide <input type="checkbox"/> Propafenone <input type="checkbox"/> Sotalol <input type="checkbox"/> Other (Beta blocker and Ca channel blocker not included) <input type="checkbox"/> Antiplatelet agent (not aspirin) <input type="checkbox"/> Aggrenox (Dipyridamole) <input type="checkbox"/> Brilinta (Ticagrelor) <input type="checkbox"/> Clopidogrel <input type="checkbox"/> Prasugrel (Effient) <input type="checkbox"/> Ticlid (Ticlopidine) <input type="checkbox"/> Other	<input type="checkbox"/> Aspirin Aspirin was used for <input type="checkbox"/> Atrial fibrillation <input type="checkbox"/> Acute coronary syndrome <input type="checkbox"/> Primary prevention of CVD <input type="checkbox"/> ACE inhibitor <input type="checkbox"/> Aldosterone antagonist <input type="checkbox"/> Alpha blockers <input type="checkbox"/> Angiotensin receptor blocker (ARB) <input type="checkbox"/> Anticoagulation Therapy <input type="checkbox"/> Warfarin (Coumadin) <input type="checkbox"/> Dabigatran (Pradaxa) <input type="checkbox"/> Argatroban <input type="checkbox"/> Apixaban (Eliquis) <input type="checkbox"/> Desirudin (Iprivask) <input type="checkbox"/> Fondaparinux (Atrixa) <input type="checkbox"/> Rivaroxaban (Xarelto) <input type="checkbox"/> Lepirudin (Refludan) <input type="checkbox"/> Other anticoagulant <input type="checkbox"/> Digoxin <input type="checkbox"/> Diuretic <input type="checkbox"/> Hydralazine Nitrate <input type="checkbox"/> NSAIDS/COX-2 Inhibitor <input type="checkbox"/> Statin
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**F. Exam/ Labs at Admission**

Presentation Symptoms Related to AF (Select all that apply)	<input type="checkbox"/> No reported symptoms <input type="checkbox"/> Syncope <input type="checkbox"/> Fatigue	<input type="checkbox"/> Chestpain/tightness/discomfort <input type="checkbox"/> Weakness <input type="checkbox"/> Palpitations dyspnea at rest	<input type="checkbox"/> Exercise intolerance <input type="checkbox"/> Dyspnea at exertion <input type="checkbox"/> Lightheadedness/dizziness
Classification of AF-related Symptoms (EHRA score)	<input type="radio"/> EHRA I No symptoms <input type="radio"/> EHRA II Mild symptoms; normal daily activity not affected <input type="radio"/> EHRA III Severe symptoms; normal daily activity affected <input type="radio"/> EHRA IV Disabling symptoms; normal daily activity discontinued		
Initial Vital Signs	Height _____ cm <input type="checkbox"/> Unknown	Weight _____ kg <input type="checkbox"/> Unknown	
	Heart Rate _____ bpm <input type="checkbox"/> Unknown	BP _____/_____ mmHg (SBP/DBP) <input type="checkbox"/> Unknown	
Initial Presenting Rhythm(s) (Select all that apply)	<input type="checkbox"/> Atrial fibrillation <input type="checkbox"/> Atrial flutter	<input type="checkbox"/> Sinus rhythm <input type="checkbox"/> Atrial tachycardia	<input type="checkbox"/> Paced <input type="checkbox"/> Other
If Paced, underlying Atrial Rhythm	<input type="radio"/> Sinus Rhythm <input type="radio"/> Atrial fib/flutter <input type="radio"/> Sinus arrest <input type="radio"/> Not available		
If Paced, Pacing Type	<input type="radio"/> Atrial pacing <input type="radio"/> Ventricular pacing <input type="radio"/> Atrial pacing		
Automated ECG	<input type="radio"/> No <input type="radio"/> Yes		
Initial EKG Findings	Resting Heart Rate (bpm) _____ <input type="checkbox"/> Not Available	QTc (ms) _____ <input type="checkbox"/> Not Available	
	QRS duration (ms) _____ <input type="checkbox"/> Not Available	PR interval(ms) _____ <input type="checkbox"/> Not Available	
Echocardiography Result	LVEF _____% <input type="checkbox"/> Not available Obtained: <input type="radio"/> This Admission <input type="radio"/> W/in the last year <input type="radio"/> > 1 year ago Left ventricular end-diastolic diameter (LVEDD): _____ mm <input type="checkbox"/> Not available Left ventricular end-systolic diameter(LVESD): _____ mm <input type="checkbox"/> Not available Thrombus: <input type="radio"/> No <input type="radio"/> Yes Atrium Size: _____ mm <input type="checkbox"/> Not available		
Labs (closest to admission)	Platelet Count _____ g/L <input type="checkbox"/> Not available	Hematocrit _____% <input type="checkbox"/> Not available	
	Hemoglobin _____ g/L <input type="checkbox"/> Not available	INR _____ <input type="checkbox"/> Not available	
	SCr _____ O mg/dL <input type="radio"/> μmol/L <input type="checkbox"/> Not available	BUN _____ o mg/dL    o μmol/L <input type="checkbox"/> Not available	
	K _____ O mEq/L O mmol/L O mg/dL <input type="checkbox"/> Not available	Mg _____ O mg/dL O mmol/L <input type="checkbox"/> Not available	
	TSH _____ mIU/L <input type="checkbox"/> Not available	BNP _____ O pg/mL O pmol/L O ng/L <input type="checkbox"/> Not available	
	NT-BNP _____ (pg/mL) <input type="checkbox"/> Not available		

**G. In-Hospital Care**

Procedures during this hospitalization	<input type="checkbox"/> No procedures <input type="checkbox"/> A-Fib ablation <input type="checkbox"/> A-Flutter ablation <i>If A -Fib or A -Flutter ablation selected above:</i> <input type="radio"/> Cryoablation <input type="radio"/> Radio frequency ablation <input type="checkbox"/> Cardioversion (check all that apply below) <input type="checkbox"/> Chemical <input type="checkbox"/> Electrical <input type="checkbox"/> TEE guided	<input type="checkbox"/> CRT-D (cardiac resynchronization therapy w/ICD) <input type="checkbox"/> CRT-P (cardiac resynchronization therapy-pacing only) <input type="checkbox"/> ICD only <input type="checkbox"/> LAA occlusion device <input type="checkbox"/> Mechanical prosthetic heart valve <input type="checkbox"/> Pacemaker <input type="checkbox"/> PCI/Cardiac catheterization <input type="checkbox"/> Bare metal stent <input type="checkbox"/> Drug eluting stent <input type="checkbox"/> Surgical MAZE
--	---	--

Oral Medications during hospitalization <i>Select all that apply</i>	<input type="checkbox"/> None <input type="checkbox"/> Antiarrhythmic <input type="checkbox"/> Amiodarone <input type="checkbox"/> Dofetilide <input type="checkbox"/> Dronedaron <input type="checkbox"/> Flecainide <input type="checkbox"/> Propafenone <input type="checkbox"/> Sotalol <input type="checkbox"/> Other	<input type="checkbox"/> Antiplatelet agent (not aspirin) <input type="checkbox"/> Aggrenox (Dipyridamole) <input type="checkbox"/> Brilinta (Ticagrelor) <input type="checkbox"/> Clopidogrel <input type="checkbox"/> Prasugrel (Effient) <input type="checkbox"/> Ticlid (Ticlopidine) <input type="checkbox"/> Other <input type="checkbox"/> Aspirin	<input type="checkbox"/> Anticoagulant <input type="checkbox"/> Warfarin <input type="checkbox"/> Dabigatran <input type="checkbox"/> Apixiban <input type="checkbox"/> Rivaroxiban <input type="checkbox"/> Ca channel blocker <input type="checkbox"/> Beta Blocker <input type="checkbox"/> Digoxin
---	--	--	---

Parenteral In-Hospital Anticoagulation	<input type="radio"/> None <input type="radio"/> Unfractionated Heparin iv. <input type="radio"/> LMW Heparin <input type="radio"/> Other iv. Anticoagulant
--	---

CHADS2 reported?(in medical record)	<input type="radio"/> No <input type="radio"/> Yes, Score _____
If yes, total reported score in medical record	

### H. Discharge Information

Discharge Date/Time ___/___/___ : ___	<input type="checkbox"/> MM/DD/YYYY only
---------------------------------------	--

Vital Signs (closest to discharge)	BP-Supine _____/_____ mmHg (systolic/diastolic) <input type="checkbox"/> Not documented Heart Rate _____ bpm <input type="checkbox"/> Not documented
---------------------------------------	---

Discharge Rhythm(s) (closest to discharge)	<input type="checkbox"/> Atrial Fibrillation <input type="checkbox"/> Sinus Rhythm <input type="checkbox"/> Paced <input type="checkbox"/> Atrial Flutter <input type="checkbox"/> Atrial Tachycardia <input type="checkbox"/> Other
---	---

EKG findings (closest to discharge):	Resting Heart Rate (bpm) <input type="checkbox"/> Not Available    QTc (ms) <input type="checkbox"/> Not Available QRS duration(ms) <input type="checkbox"/> Not Available    PR interval(ms) <input type="checkbox"/> Not Available
--------------------------------------	---

Discharge EKG QRS Morphology	<input type="radio"/> Normal <input type="radio"/> RBBB <input type="radio"/> LBBB <input type="radio"/> NS-TVCD <input type="radio"/> Not Available
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Labs (closest to discharge)	Platelet Count _____ g/L <input type="checkbox"/> Not Available    INR _____ <input type="checkbox"/> Not Available SCr _____ mg/dL <input type="checkbox"/> Not Available <input type="checkbox"/> Not Available
--------------------------------	--

### I. Discharge Medication

Anticoagulation Therapy	Prescribed? <input type="radio"/> No <input type="radio"/> Yes If yes, Medication: _____    Dosage: _____ mg    Frequency: _____ times/day Medication: _____    Dosage: _____ mg    Frequency: _____ times/day Contraindicated? <input type="radio"/> No <input type="radio"/> Yes
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	<input type="checkbox"/> Are there any relative or absolute contraindications to oral anticoagulant therapy? (Check all that apply)														
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><input type="checkbox"/> Allergy</td> <td style="width: 50%; border: none;"><input type="checkbox"/> Unable to adhere/monitor</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Occupational risk</td> <td style="border: none;"><input type="checkbox"/> High bleeding risk</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Prior intracranial hemorrhage</td> <td style="border: none;"><input type="checkbox"/> Comorbid illness (e.g. renal/liver)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Bleeding Event</td> <td style="border: none;"><input type="checkbox"/> Need for dual antiplatelet</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Frequent falls/frailty</td> <td style="border: none;"><input type="checkbox"/> Patient refusal/preference</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Physician preference</td> <td style="border: none;"><input type="checkbox"/> Current pregnancy</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Recent operation therapy</td> <td style="border: none;"></td> </tr> </table>	<input type="checkbox"/> Allergy	<input type="checkbox"/> Unable to adhere/monitor	<input type="checkbox"/> Occupational risk	<input type="checkbox"/> High bleeding risk	<input type="checkbox"/> Prior intracranial hemorrhage	<input type="checkbox"/> Comorbid illness (e.g. renal/liver)	<input type="checkbox"/> Bleeding Event	<input type="checkbox"/> Need for dual antiplatelet	<input type="checkbox"/> Frequent falls/frailty	<input type="checkbox"/> Patient refusal/preference	<input type="checkbox"/> Physician preference	<input type="checkbox"/> Current pregnancy	<input type="checkbox"/> Recent operation therapy	
<input type="checkbox"/> Allergy	<input type="checkbox"/> Unable to adhere/monitor														
<input type="checkbox"/> Occupational risk	<input type="checkbox"/> High bleeding risk														
<input type="checkbox"/> Prior intracranial hemorrhage	<input type="checkbox"/> Comorbid illness (e.g. renal/liver)														
<input type="checkbox"/> Bleeding Event	<input type="checkbox"/> Need for dual antiplatelet														
<input type="checkbox"/> Frequent falls/frailty	<input type="checkbox"/> Patient refusal/preference														
<input type="checkbox"/> Physician preference	<input type="checkbox"/> Current pregnancy														
<input type="checkbox"/> Recent operation therapy															

Aspirin	Prescribed? <input type="radio"/> No <input type="radio"/> Yes If yes, Medication: _____    Dosage: _____ mg    Frequency: _____ times/day Contraindicated? <input type="radio"/> No <input type="radio"/> Yes
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Other Antiplatelet(s)	Prescribed? <input type="radio"/> No <input type="radio"/> Yes If yes, Medication: _____    Dosage: _____ mg    Frequency: _____ times/day Medication: _____    Dosage: _____ mg    Frequency: _____ times/day
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	Contraindicated?	O No O Yes
Beta Blocker	Prescribed?	O No O Yes
	If yes,	Medication: _____ Dosage: _____mg Frequency: _____ times/day
	Contraindicated?	O No O Yes
Calcium Channel Blocker	Prescribed?	O No O Yes
	If yes,	Medication: _____ Dosage: _____mg Frequency: _____ times/day
	Contraindicated?	O No O Yes
Other Antiarrhythmic	Prescribed?	O No O Yes
	If yes,	Medication: _____ Dosage: _____mg Frequency: _____ times/day
	Were Dofetilide or Sotalol newly initiated or dose increased this hospitalization?	O No O Yes
	If yes, was a QT interval documented after 5 doses and prior to discharge?	O No O Yes
ACEI	Prescribed?	O No O Yes
	If yes,	Medication: _____ Dosage: _____mg Frequency: _____ times/day
	Contraindicated?	O No O Yes
ARB	Prescribed?	O No O Yes
	If yes,	Medication: _____ Dosage: _____mg Frequency: _____ times/day
	Contraindicated?	O No O Yes
Aldosterone Antagonist	Prescribed?	O No O Yes
	If yes,	Medication: _____ Dosage: _____mg Frequency: _____ times/day
	Contraindicated?	O No O Yes
Digoxin	Prescribed?	O No O Yes
	If yes,	Medication: _____ Dosage: _____mg Frequency: _____ times/day
	Contraindicated?	O No O Yes
Statin Therapy	Prescribed?	O No O Yes
	Contraindicated?	O No O Yes
Hydralazine Nitrate	Prescribed?	O No O Yes
	Contraindicated?	O No O Yes
Other Medications at Discharge	<input type="checkbox"/> Diuretic O No O Yes <input type="checkbox"/> NSAIDS/COX-2 Inhibitor O No O Yes	

<b>J. Risk Interventions</b>	
Smoking Cessation Counseling Given	O No/ Not Documented O Yes O Not Applicable
Rhythm Control/Rate Control Strategy Planned/Intended	O Rhythm Control Strategy Planned O Rate Control Strategy Planned O No Documentation of Strategy
Patient and/or caregiver received education and/or resource materials regarding all of the following:	<input type="checkbox"/> All were addressed (Check all yes) Risk factors O No O Yes      Stroke Risk O No O Yes Management O No O Yes      Medication Adherence O No O Yes Follow-up O No O Yes      When to call provide O No O Yes
Anticoagulation Therapy Education Given	O No O Yes

PT/INR Planned Follow-up	<input type="radio"/> No <input type="radio"/> Yes → Who will be following patients INR? <input type="radio"/> Home INR Monitoring <input type="radio"/> Anticoagulation Warfarin Clinic <input type="radio"/> Managed by Physician associated with hospital <input type="radio"/> Managed by outside physician <input type="radio"/> Not documented Date of INR test planned post discharge: ___/___/___ <input type="checkbox"/> Not Documented System Reason for no PT/INR Planned Follow-up <input type="radio"/> No <input type="radio"/> Yes
TLC (Therapeutic Lifestyle Change) Diet	<input type="radio"/> No/ Not Documented <input type="radio"/> Yes <input type="radio"/> Not Applicable
Obesity Weight Management	<input type="radio"/> No/ Not Documented <input type="radio"/> Yes <input type="radio"/> Not Applicable
Activity Level/Recommendation	<input type="radio"/> No/ Not Documented <input type="radio"/> Yes <input type="radio"/> Not Applicable
Screening for obstructive sleep apnea (Berlin Questionnaire)	<input type="radio"/> No/ Not Documented <input type="radio"/> Yes <input type="radio"/> Not Applicable
Referral for evaluation of obstructive sleep apnea if positive screen	<input type="radio"/> No/ Not Documented <input type="radio"/> Yes <input type="radio"/> Not Applicable
Discharge medication instruction provided	<input type="radio"/> No/ Not Documented <input type="radio"/> Yes <input type="radio"/> Not Applicable

**K. Admin**

Principal Diagnosis: \_\_\_\_\_ Principal Diagnosis Code: \_\_\_\_\_

Other Diagnose 1: \_\_\_\_\_ Other Diagnose Code1: \_\_\_\_\_

Other Diagnose 2: \_\_\_\_\_ Other Diagnose Code2: \_\_\_\_\_

Other Diagnose 3: \_\_\_\_\_ Other Diagnose Code 3: \_\_\_\_\_

Other Diagnose 4: \_\_\_\_\_ Other Diagnose Code 4: \_\_\_\_\_

Other Diagnose 5: \_\_\_\_\_ Other Diagnose Code 5: \_\_\_\_\_

Other Diagnose 6: \_\_\_\_\_ Other Diagnose Code 6: \_\_\_\_\_

Other Diagnose 7: \_\_\_\_\_ Other Diagnose Code 7: \_\_\_\_\_

Principal Procedure: \_\_\_\_\_ Principal Procedure Code: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_    Date UTD

Other Procedure 1: \_\_\_\_\_ Other Procedure Code 1: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_    Date UTD

Other Procedure 2: \_\_\_\_\_ Other Procedure Code 2: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_    Date UTD

Other Procedure 3: \_\_\_\_\_ Other Procedure Code 3: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_    Date UTD

Other Procedure 4: \_\_\_\_\_ Other Procedure Code 4: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_    Date UTD

During this hospital stay, was the patient enrolled in a clinical trial in which patients with the same condition as the measure set were being studied?    No    Yes

**L. CHADS2 Calculation Tool**

*(Enabled if "No" is selected for CHADS<sub>2</sub> Reported (in medical record)?)*

- Prior stroke or TIA
- Age > 75
- Hypertension
- Diabetes
- Congestive Heart Failure

**M. Other Risk Scores**

**NOTE: CHADS<sub>2</sub>-VAsc is an extension of the CHADS<sub>2</sub> score. It contains additional risk categories and can be used as a complimentary tool in the assessment of thromboembolic risk in atrial fibrillation patients. The AHA/ACC Guidelines support the use of the CHADS<sub>2</sub> score in assessment of thromboembolic risk and**



indication for anticoagulation therapy is stratified using the CHADS<sub>2</sub> score.

<b>CHADS<sub>2</sub>-VASc Score</b>	<input type="checkbox"/> Congestive Heart Failure <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypertension (blood pressure consistently above 140/90 or treated with hypertension medication) <input type="checkbox"/> Prior stroke/TIA/Thromboembolism <input type="checkbox"/> Age ≥ 75 <input type="checkbox"/> Vascular Disease History (CAD, Prior MI, or PAD) <input type="checkbox"/> Age 65-74 <input type="checkbox"/> Female Gender
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Adapted from a methodology used by the American College of Chest Physicians: Lip GY, Niewlatt R, Pisters R, Lane DA, Crijns HJ, et al. Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation. *CHEST* 2010 Feb;137(2):263-72. doi: 10.1378/chest.09-1584. Epub 2009 Sep 17. <http://journal.publications.chestnet.org/article.aspx?articleid=1045174>

**DISCLAIMER: These tools (ATRIA and HAS-BLED) are presented for informational purposes only and not as an endorsement of their use in clinical decision making. Many of the same risk factors for warfarin-related hemorrhage are also risk factors for AF-associated ischemic stroke. The use of these tools as an exclusion for anticoagulation is not part of AHA/ACC guideline-recommended care for patients with AF. Additionally, some of the component elements in the HAS-BLED score, such as Labile INR and Prior Major Bleeding or Pre-Disposition to Bleeding may be difficult to reliably ascertain from the information available in the health record. The HAS- BLED score should be interpreted with this in mind.**

<b>ATRIA Risk Score</b>	<input type="checkbox"/> Age ≥ 75 years <input type="checkbox"/> Anemia (Defined as Hemoglobin < 13 g/dL in men and < 12 g/dL in women) <input type="checkbox"/> History of Hypertension <input type="checkbox"/> Severe Renal Disease (defined as a GFR < 30ml/min or on dialysis) <input type="checkbox"/> Prior hemorrhage (intracranial, gastrointestinal, other hemorrhage)
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Adapted from a methodology used by the American College of Cardiology: Fang MC, Go AS, Chang Y, et al. A New Risk Scheme to Predict Warfarin-Associated Hemorrhage: The ATRIA (Anticoagulation and Risk Factors in Atrial Fibrillation) Study. *J Am Coll Cardiol* 2011;58(4):395-401. doi:10.1016/j.jacc.2011.03.031. <http://content.onlinejacc.org/article.aspx?articleid=1146658#Abstract>

<b>HAS-BLED Score</b>	<input type="checkbox"/> Hypertension History (uncontrolled, >160 mmHg systolic) <input type="checkbox"/> Renal Disease (Dialysis, transplant, Cr >2.6 mg/dL or >200 μmol/L) <input type="checkbox"/> Liver Disease (Chronic Hepatic Disease, including (e.g.) Cirrhosis, Bilirubin >2x Normal, AST/ALT/AP >3x Normal) <input type="checkbox"/> Stroke History <input type="checkbox"/> Prior Major Bleeding or Predisposition to Bleeding (bleeding diathesis, anemia, etc.) <input type="checkbox"/> Labile INR (Unstable/high INRs or time in therapeutic range <60%) <input type="checkbox"/> Age > 65 <input type="checkbox"/> Medication Usage Predisposing to Bleeding (Antiplatelet agents, NSAIDs) <input type="checkbox"/> Alcohol Usage History (>20 units per week)
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Adapted from a methodology used by the American College of Chest Physicians: Pisters R, Lane DA, Nieuwlaat R, de Vos CB, Crijns HM, Lip GH. A novel user-friendly score (has-bleed) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the euro heart survey. *Chest*, 2010;138(5):1093-1100. <http://journal.publications.chestnet.org/article.aspx?articleid=1086288>

**Table S5. Definition of Primary Performance Measures**

**Primary performance measure 1:**

**Proportion of patients with nonvalvular atrial fibrillation in whom assessment of thromboembolic risk**

The proportion of patients with nonvalvular atrial fibrillation in whom assessment of thromboembolic risk using CHADS<sub>2</sub> or CHA<sub>2</sub>DS<sub>2</sub>-VASc score have been documented in medical records.

<b>Numerator</b>	<p>AF patients reporting CHADS<sub>2</sub> or CHA<sub>2</sub>DS<sub>2</sub>-VASc risk score to assess the thromboembolic risk factors.</p> <p><b>Relevant data elements:</b></p> <p>(CHADS<sub>2</sub>=“Yes” and CHADS<sub>2</sub> score is not NA), or(CHA<sub>2</sub>DS<sub>2</sub>-VASc score=“Yes” and CHA<sub>2</sub>DS<sub>2</sub>-VASc score is not NA)</p>
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<b>Denominator</b>	<p><b>Include:</b></p> <p>Nonvalvular AF patients</p> <p>Relevant data elements:</p> <p>Atrial arrhythmia type=“Nonvalvular atrial fibrillation”</p> <p><b>Exclude:</b></p> <ul style="list-style-type: none"> <li>① Patients with a medical history of mitral stenosis or a mechanical prosthetic heart valve</li> <li>② Patients who are newly diagnosed with mitral stenosis this hospitalization</li> <li>③ Patients who have a mechanic prosthetic heart valve implanted during their hospitalization</li> <li>④ Patients for whom there is a documented contraindication to anticoagulation therapy</li> </ul> <p>Relevant data elements:</p> <ul style="list-style-type: none"> <li>① Medical history of mitral stenosis=“Yes” or mechanic prosthetic heart valve=“Yes”</li> <li>② Mitral stenosis =“Yes”</li> <li>③ Mechanic prosthetic heart valve=“Yes”</li> <li>④ Contraindication to anticoagulation therapy=“Yes”</li> </ul>
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**Evaluation time**      At discharge

**Data sources**            Case records

**Reasons for evaluation**

The assessment of thromboembolic risk factors according to baseline characters is the foundation to make right decisions for anticoagulation therapy.

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## Guidelines

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### **AHA/ACC 2014 AF guidelines**

#### *Class I*

In patients with nonvalvular AF, the CHA<sub>2</sub>DS<sub>2</sub>-VASc score is recommended for assessment of stroke risk. (*Level of evidence: B*)

In patients with AF, antithrombotic therapy should be individualized based on shared decision making after discussion of the absolute and RRs of stroke and bleeding, and the patient's values and preferences. (*Level of Evidence: C*)

For patients with atrial flutter, antithrombotic therapy is recommended according to the same risk profile used for AF. (*Level of Evidence: C*)

### **ESC 2010 AF guidelines**

#### *Class I*

The CHADS<sub>2</sub> [cardiac failure, hypertension, age, diabetes, stroke (doubled)] score is recommended as a simple initial (easily remembered) means of assessing stroke risk in non-valvular AF. (*Level of Evidence: A*)

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## Ways of reporting

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Percentages and numerator/denominator

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## Primary performance measure 2 :

### Proportion of AF patients with indication prescribed an anticoagulant drug at hospital discharge

	AF patients receiving warfarin, dabigatran, argatroban or rivaroxaban at discharge
<b>Numerator</b>	<b>Relevant data elements:</b>  Anticoagulation therapy="Yes", and Warfarin="Yes" or dabigatran="Yes" or argatroban="Yes" or rivaroxaban="Yes"
	<b>Include:</b>  Nonvalvular AF patients with CHA <sub>2</sub> DS <sub>2</sub> -VASC <sub>2</sub> ≥2  Relevant data elements:  Atrial arrhythmia type="Nonvalvular atrial fibrillation", and CHA <sub>2</sub> DS <sub>2</sub> -VASC score ≥2  <b>Exclude:</b>  ① Patients with a medical history of mitral stenosis or a mechanical prosthetic heart valve ② Patients who are newly diagnosed with mitral stenosis this hospitalization ③ Patients who have a mechanic prosthetic heart valve implanted during their hospitalization
<b>Denominator</b>	④ Patients for whom there is a documented contraindication to anticoagulation therapy ⑤ Expire during hospitalization  Relevant data elements:  ① Mitral stenosis="Yes" or mechanic prosthetic heart valve="Yes" ② Mitral stenosis="Yes" ③ Mechanic prosthetic heart valve="Yes" ④ Contraindication to anticoagulation therapy="Yes" or any of the following is "Yes": allergy, occupational risk, prior intracranial hemorrhage, bleeding event, frequent falls/frailty, recent operation therapy, unable to adhere/monitor, high bleeding risk, comorbid illness (e.g. renal/liver), patient refusal/preference, or current pregnancy ⑤ Expire="Yes"
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

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### Reasons for evaluation

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The reasonable anticoagulation therapy can better the quality of life and long-term prognosis of AF patients.

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### Guidelines

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#### **AHA/ACC 2014 AF guidelines**

##### *Class I*

For patients with nonvalvular AF with prior stroke, transient ischemic attack (TIA), or a CHA<sub>2</sub>DS<sub>2</sub>-VASC score of 2 or greater, oral anticoagulants are recommended. Options include:

- Warfarin (INR 2.0 to 3.0) (*Level of Evidence: A*)
- Dabigatran, rivaroxaban or apixaban (*Level of Evidence: B*)

For patients with atrial flutter, antithrombotic therapy is recommended according to the same risk profile used for AF. (*Level of Evidence: C*)

##### *Class IIa*

For patients with nonvalvular AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASC score of 0, it is reasonable to omit antithrombotic therapy (81, 82). (*Level of Evidence: B*)

##### *Class IIb*

For patients with nonvalvular AF and a CHA<sub>2</sub>DS<sub>2</sub>-VASC score of 1, no antithrombotic therapy or treatment with an oral anticoagulant or aspirin may be considered. (*Level of Evidence: C*)

#### **ESC 2010 AF guidelines**

##### *Class I*

For the patients with a CHADS<sub>2</sub> score of  $\geq 2$ , chronic oral anticoagulant (OAC) therapy with a vitamin K antagonist (VKA) is recommended in a dose adjusted regimen to achieve an INR range of 2.0–3.0 (target 2.5), unless contraindicated. (*Level of Evidence: A*)

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### Ways of reporting

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Percentages and numerator/denominator

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### Primary performance measure 3 :

#### Proportion of patients discharged on warfarin who have PT/INR follow-up planned prior to hospital discharge

The proportion of patients discharged on warfarin who have PT/INR follow-up planned prior to hospital discharge.

<b>Numerator</b>	Patients who have PT/INR follow-up planned prior to hospital discharge <b>Relevant data elements:</b> PT/INR follow-up plan="Yes"
<b>Denominator</b>	<b>Include:</b> Patients discharged on warfarin Relevant data elements: Anticoagulation therapy="Yes", and warfarin="Yes" <b>Exclude:</b> ① System reason for no PT/INR planned follow-up ② Expire during hospitalization Relevant data elements: ① System reason for no PT/INR planned follow-up="Yes" ② Expire="Yes"
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

#### Reasons for evaluation

Regular anticoagulation therapy, PT/INR planned follow-up and systematic anticoagulation management can lower the risk of thromboembolism and bleeding events.

#### Guidelines

AHA/ACC 2014 AF guidelines

##### *Class I*

Among patients treated with warfarin, the INR should be determined at least weekly during initiation of antithrombotic therapy and at least monthly when anticoagulation (INR in range) is stable. (*Level of Evidence: A*)

For patients with nonvalvular AF unable to maintain a therapeutic INR level with warfarin, use of a direct thrombin or factor Xa inhibitor (dabigatran, rivaroxaban, or apixaban) is recommended. (*Level of Evidence: C*)

#### Ways of reporting

Percentages and numerator/denominator

## Primary performance measure 4 :

### Proportion of AF patients with indications receiving ACEI/ARB at discharge

The proportion of AF patients with indications receiving ACEI/ARB at discharge

The indications refer to: the diagnosis with AMI during this hospitalization; the diagnosis with coronary heart disease during this hospitalization and the comorbidity of hypertension, diabetes mellitus or chronic kidney disease; LVEF<40% according to the case records.

<b>Numerator</b>	AF patients receiving ACEI or ARB at discharge <b>Relevant data elements:</b> ACEI = "Yes" , or ARB = "Yes"
<b>Denominator</b>	<b>Include:</b> AF patients with the following indications: ① Patients who are newly diagnosed with AMI this hospitalization ; or ② Patients who are diagnosed with coronary heart disease during their hospitalization and the comorbidity of hypertension, diabetes mellitus or chronic kidney disease ; or ③ LVEF<40% according to the case records <b>Relevant data elements:</b> ① AMI = "Yes" ; or ② Coronary heart disease = "Yes", and (a medical history of hypertension = "Yes", or diabetes mellitus = "Yes", or kidney disease = "Yes") ; or ③ LVEF < 40% <b>Exclude:</b> ① Contraindication to ACEI and ARB ② Expire during hospitalization <b>Relevant data elements:</b> ① Contraindication to ACEI = "Yes", and Contraindication to ARB = "Yes" ② Expire = "Yes"
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

#### Reasons for evaluation

ACEI/ARB can lower the recurrence risk of AF.

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## Guidelines

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### **AHA/ACC 2014 AF guidelines**

#### *Class IIa*

An ACE inhibitor or angiotensin-receptor blocker (ARB) is reasonable for primary prevention of new-onset AF in patients with HF with reduced LVEF. (*Level of Evidence: B*)

#### *Class IIb*

Therapy with an ACE inhibitor or ARB may be considered for primary prevention of new-onset AF in the setting of hypertension (34, 151). (*Level of Evidence: B*)

#### *Class III: No Benefit*

Therapy with an ACE inhibitor, ARB, or statin is not beneficial for primary prevention of AF in patients without cardiovascular disease. (*Level of Evidence: B*)

### **AHA/ACC 2014 NSTEMI-ACS guidelines**

#### *CLASS I*

1. ACE inhibitors should be started and continued indefinitely in all patients with LVEF less than 0.40 and in those with hypertension, diabetes mellitus, or stable CKD, unless contraindicated. (*Level of Evidence: A*)
2. ARBs are recommended in patients with HF or MI with LVEF less than 0.40 who are ACE inhibitor intolerant. (*Level of Evidence: A*)
3. Aldosterone blockade is recommended in patients post-MI without significant renal dysfunction (creatinine >2.5 mg/dL in men or >2.0 mg/dL in women) or hyperkalemia ( $K^+$  >5.0 mEq/L) who are receiving therapeutic doses of ACE inhibitor and beta blocker and have a LVEF 0.40 or less, diabetes mellitus, or HF. (*Level of Evidence: A*)

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## Ways of reporting

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Percentages and numerator/denominator

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**Primary performance measure 5:  
Proportion of AF patients with indication prescribed a beta blocker at hospital discharge**

The proportion of AF patients with indication prescribed a beta blocker at hospital discharge.

The indication refers to heart failure.

<b>Numerator</b>	AF patients receiving beta blocker at discharge <b>Relevant data elements:</b> Beta blocker="Yes"
<b>Denominator</b>	<b>Include:</b> AF patients with heart failure Relevant data elements: Were any of the following first detected on this admission? Heart failure="Yes" <b>Exclude:</b> ① Contraindication to beta blocker ② Expire during hospitalization Relevant data elements: ① Contraindication to beta blocker="Yes" ② Expire="Yes"
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

**Reasons for evaluation**

Beta blocker can lower the all-cause mortality and cardiovascular mortality of AF patients.

**Guidelines**

**ESC 2010 AF guidelines**

*Class I*

Blockers are recommended as first-line therapy to control the ventricular rate in patients with heart failure and low LVEF. (*Level of Evidence: A*)

**AHA/ACC 2014 AF guidelines**

*Class I*

Control of resting heart rate using either a beta blocker or a nondihydropyridine calcium channel antagonist is recommended for patients with persistent or permanent AF and compensated HF with preserved EF (HFpEF) (96). (*Level of Evidence: B*)

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In the absence of pre-excitation, intravenous beta blocker administration (or a nondihydropyridine calcium channel antagonist in patients with HFpEF) is recommended to slow the ventricular response to AF in the acute setting, with caution needed in patients with overt congestion, hypotension, or HF with reduced LVEF (180-183). (*Level of Evidence: B*)

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#### **Ways of reporting**

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Percentages and numerator/denominator

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**Primary performance measure 6 :  
Proportion of AF patients with indication prescribed a statin at hospital discharge**

The proportion of AF patients with coronary heart disease, ischemic stroke/TIA, peripheral vascular disease (or diabetes mellitus) prescribed a statin at hospital discharge

<b>Numerator</b>	AF patients receiving statin at discharge <b>Relevant data elements:</b> Statin="Yes"
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<b>Denominator</b>	<p><b>Include:</b> AF patients with coronary heart disease, ischemic stroke/TIA, peripheral vascular disease (or diabetes mellitus)</p> <p>Relevant data elements: In the medical history, coronary heart disease, peripheral vascular disease, ischemic stroke, TIA or diabetes mellitus="Yes" or during this hospitalization , coronary heart disease, diabetes mellitus, peripheral vascular disease, ischemic stroke or TIA="Yes"</p> <p><b>Exclude:</b></p> <ul style="list-style-type: none"> <li>① Contraindication to statin</li> <li>② Expire during hospitalization</li> </ul> <p>Relevant data elements:</p> <ul style="list-style-type: none"> <li>① Contraindication to statin="Yes"</li> <li>② Expire="Yes"</li> </ul>
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<b>Evaluation time</b>	At discharge
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<b>Data sources</b>	Case records
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<b>Reasons for evaluation</b>	
NA	

**Guidelines**

**AHA/ACC 2014 AF guidelines**  
*Class IIb*  
Statin therapy may be reasonable for primary prevention of new-onset AF after coronary artery surgery. (*Level of Evidence: A*)

*Class III: No Benefit*  
Therapy with an ACE inhibitor, ARB, or statin is not beneficial for primary prevention of AF in patients without cardiovascular disease. (*Level of Evidence: B*)

**ACC F/ AHA 2013 STEMI guidelines**  
*Class I*  
High-intensity statin therapy should be initiated or continued in all patients with STEMI and no

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contraindications to its use. (Level of Evidence: B)

**AHA/ACC 2014 NSTEMI- guidelines**

Class I

High-intensity statin therapy should be initiated or continued in all patients with NSTEMI-ACS and no contraindications to its use. (Level of Evidence: A)

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**Ways of reporting**

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Percentages and numerator/denominator

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**Table S6. Definition of Secondary Performance Measures**

<b>Secondary performance measure 1 :</b>	
<b>Proportion of nonvalvular AF patients who had a CHADS<sub>2</sub> score reported</b>	
The proportion of nonvalvular AF patients who had a CHADS <sub>2</sub> score reported to assess the risk of thromboembolism	
<b>Numerator</b>	The nonvalvular AF patients who had a CHADS <sub>2</sub> score reported <b>Relevant data elements:</b> CHADS <sub>2</sub> =“Yes” and CHADS <sub>2</sub> score is not NA
<b>Denominator</b>	<p><b>Include:</b> Nonvalvular AF patients Relevant data elements: Atrial arrhythmia type=“Nonvalvular atrial fibrillation”</p> <p><b>Exclude:</b></p> <ul style="list-style-type: none"> <li>① Patients with a medical history of mitral stenosis or a mechanical prosthetic heart valve</li> <li>② Patients who are newly diagnosed with mitral stenosis this hospitalization</li> <li>③ Patients who have a mechanic prosthetic heart valve implanted during their hospitalization</li> <li>④ Patients for whom there is a documented contraindication to anticoagulation therapy</li> </ul> <p>Relevant data elements:</p> <ul style="list-style-type: none"> <li>① Mitral stenosis=“Yes” or mechanic prosthetic heart valve=“Yes”</li> <li>② Mitral stenosis=“Yes”</li> <li>③ Mechanic prosthetic heart valve=“Yes”</li> <li>④ Contraindication to anticoagulation therapy=“Yes”</li> </ul>
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records
<b>Reasons for evaluation</b>	
The assessment of thromboembolic risk factors according to baseline characters is the foundation to make right decisions for anticoagulation therapy.	
<b>Guidelines</b>	
<b>ESC 2010 AF guidelines</b>	
<i>Class I</i>	
The CHADS <sub>2</sub> [cardiac failure, hypertension, age, diabetes, stroke (doubled)] score is recommended as a simple initial (easily remembered) means of assessing stroke risk in non-valvular AF. ( <i>Level of Evidence: A</i> )	

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## Ways of reporting

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Percentages and numerator/denominator

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## Secondary performance measure 2 :

### Proportion of nonvalvular AF patients who had a CHA<sub>2</sub>DS<sub>2</sub>-VASc score reported

The proportion of nonvalvular AF patients who had a CHA<sub>2</sub>DS<sub>2</sub>-VASc score reported to assess the risk of thromboembolism

<b>Numerator</b>	The nonvalvular AF patients who had a CHA <sub>2</sub> DS <sub>2</sub> -VASc score reported <b>Relevant data elements:</b> CHA <sub>2</sub> DS <sub>2</sub> -VASc score="Yes", and CHA <sub>2</sub> DS <sub>2</sub> -VASc score is not NA
<b>Denominator</b>	<b>Include:</b> Nonvalvular AF patients Relevant data elements: Atrial arrhythmia type="Nonvalvular atrial fibrillation" <b>Exclude:</b> ① Patients with a medical history of mitral stenosis or a mechanical prosthetic heart valve ② Patients who are newly diagnosed with mitral stenosis this hospitalization ③ Patients who have a mechanic prosthetic heart valve implanted during their hospitalization ④ Patients for whom there is a documented contraindication to anticoagulation therapy Relevant data elements: ① Medical history of mitral stenosis="Yes" or mechanic prosthetic heart valve="Yes" ② Mitral stenosis="Yes" ③ Mechanic prosthetic heart valve="Yes" ④ Contraindication to anticoagulation therapy="Yes"
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

### Reasons for evaluation

The assessment of thromboembolic risk factors according to baseline characters is the foundation to make right decisions for anticoagulation therapy.

### Guidelines

#### AHA/ACC 2014 AF guidelines

##### *Class I*

In patients with nonvalvular AF, the CHA<sub>2</sub>DS<sub>2</sub>-VASc score is recommended for assessment of stroke risk. (*Level of evidence: B*)

In patients with AF, antithrombotic therapy should be individualized based on shared decision making after discussion of the absolute and RRs of stroke and bleeding, and the patient's values and preferences. (*Level of Evidence: C*)

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For patients with atrial flutter, antithrombotic therapy is recommended according to the same risk profile used for AF. (*Level of Evidence: C*)

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**Ways of reporting**

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Percentages and numerator/denominator

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**Secondary performance measure 3 :  
Proportion of AF patients who have a documented resting heart rate of <80 bpm closest to hospital discharge**

The proportion of AF patients who have a documented resting heart rate of <80 bpm closest to hospital discharge

**Numerator** AF patients who have a documented resting heart rate of <80 bpm closest to hospital discharge  
**Relevant data elements:**  
Resting heart rate(bpm) <80

**Denominator**  
**Include:**  
Nonvalvular AF patients  
Relevant data elements:  
Atrial arrhythmia type =“Nonvalvular atrial fibrillation”  
**Exclude:**  
① Data missing of resting heart rate closest to hospital discharge  
② Expire during hospitalization  
Relevant data elements:  
① Resting heart rate(bpm) is NA  
② Expire=“Yes”

**Evaluation time** At discharge

**Data sources** Case records

**Reasons for evaluation**

Rate control can better cardiac function and lower the risk of thromboembolism.

**Guidelines**

**AHA/ACC 2014 AF guidelines**

*Class IIa*

A heart rate control (resting heart rate <80 bpm) strategy is reasonable for symptomatic management of AF. *(Level of Evidence: B)*

*Class IIb*

A lenient rate-control strategy (resting heart rate <110 bpm) may be reasonable as long as patients remain asymptomatic and LV systolic function is preserved. *(Level of Evidence: B)*

**Ways of reporting**

Percentages and numerator/denominator

## Secondary performance measure 4 :

### Proportion of providing anticoagulation therapy education

The proportion of AF patients who receive anticoagulation drugs at discharge that receiving anticoagulation therapy education during the hospitalization

The anticoagulation therapy education refers to receiving education about anticoagulation therapy or education materials: the effect of anticoagulation drugs, the meaning of TNR planned follow-up and the side effect of anticoagulation drugs.

<b>Numerator</b>	AF patients that receiving anticoagulation therapy education <b>Relevant data elements:</b> Anticoagulation therapy education="Yes"
<b>Denominator</b>	<b>Include:</b> Patients that receiving anticoagulation therapy at discharge Relevant data elements: Anticoagulation therapy="Yes" <b>Exclude:</b> Expire during hospitalization Relevant data elements: Expire="Yes"
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

### Reasons for evaluation

Regular anticoagulation therapy, PT/INR planned follow-up and systematic anticoagulation management can lower the risk of thromboembolism and bleeding events. The anticoagulation therapy education is helpful to patients' compliance and prognosis.

### Guidelines

NA

### Ways of reporting

Percentages and numerator/denominator

## Secondary performance measure 5 :

### Proportion of AF patients that receiving conventional medical education

The proportion of AF patients that receiving the following conventional medical education: risk factors, risk of stroke, management, compliance of drugs, follow-up and when to seek medical help

<b>Numerator</b>	AF patients that receiving three or more of the following medical education during hospitalization: risk factors, stroke risk, management, medication adherence, follow-up and when to call provide. <b>Relevant data elements:</b>  Three or more of risk factors, management, follow-up, stroke risk, medication adherence and when to call provide are “Yes”
<b>Denominator</b>	<b>Include:</b> AF patients <b>Exclude:</b> Expire during hospitalization <b>Relevant data elements:</b> Expire=“Yes”
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

#### Reasons for evaluation

The medical education during hospitalization about risk factors, stroke risk, management, medication adherence, follow-up and when to call provide is helpful to patients’ compliance and prognosis.

#### Guidelines

NA

#### Ways of reporting

Percentages and numerator/denominator

## Secondary performance measure 6:

### Proportion of AF patients with indication prescribed aldosterone antagonist at discharge

The proportion of AF patients with indication prescribed aldosterone antagonist at discharge.

The indications refer to: the patient was diagnosed with AMI during this hospitalization with LVEF<40% or heart failure or diabetes mellitus; OR, the heart failure patients with LVEF<35%.

<b>Numerator</b>	AF patients prescribed aldosterone antagonist <b>Relevant data elements:</b> Aldosterone antagonist = "Yes"
<b>Denominator</b>	<b>Included:</b> ① The patient was diagnosed with AMI during this hospitalization with LVEF<40% or heart failure or diabetes mellitus; or ② The heart failure patients with LVEF<35%. <b>Relevant data elements:</b> ① AMI="Yes", and ( LVEF < 40% , or a medical history of heart failure="Yes" or a medical history of diabetes mellitus="Yes", or heart failure="Yes" or diabetes mellitus="Yes" ) ; or ② LVEF< 35% , and ( a medical history of heart failure="Yes" or heart failure="Yes" ) <b>Excluded population:</b> ① Contraindication to aldosterone antagonist ② Expire during hospitalization ③ With chronic kidney disease <b>Relevant data elements:</b> ① Contraindication to aldosterone antagonist= "Yes" ② Expire="Yes" ③ Kidney disease="Yes"
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records
<b>Reasons for evaluation</b>	
NA	
<b>Guidelines</b>	
<b>ACC F/ AHA 2013 STEMI guidelines</b> <i>Class I</i> An aldosterone antagonist should be given to patients with STEMI and no contraindications who	

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are already receiving an ACE inhibitor and beta blocker and who have an EF less than or equal to 0.40 and either symptomatic HF or diabetes mellitus. (*Level of Evidence: B*)

**AHA/ACC 2014 NSTE-ACS guidelines**

*CLASS I*

Aldosterone blockade is recommended in patients post-MI without significant renal dysfunction (creatinine >2.5 mg/dL in men or >2.0 mg/dL in women) or hyperkalemia (K<sup>+</sup> >5.0 mEq/L) who are receiving therapeutic doses of ACE inhibitor and beta blocker and have a LVEF 0.40 or less, diabetes mellitus, or HF. (*Level of Evidence: A*)

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**Ways of reporting**

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Percentages and numerator/denominator

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**Secondary performance measure 7 :  
Proportion valvular AF patients prescribed warfarin at hospital discharge**

The proportion valvular AF patients prescribed warfarin at hospital discharge

	The valvular AF patients prescribed warfarin at hospital discharge
<b>Numerator</b>	<p><b>Relevant data elements:</b></p> <p>Anticoagulation therapy="Yes", and warfarin="Yes"</p>
<b>Denominator</b>	<p><b>Include:</b></p> <p>Valvular AF patients</p> <p>Relevant data elements:</p> <p>Atrial arrhythmia type="valvular atrial fibrillation"</p> <p><b>Exclude:</b></p> <p>① Contraindication to anticoagulation therapy</p> <p>② Expire during hospitalization</p> <p>Relevant data elements:</p> <p>① Contraindication to anticoagulation therapy="Yes"</p> <p>② Expire="Yes"</p>
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records

**Reasons for evaluation**

NA

**Guidelines**

**ESC 2010 AF guidelines**

*Class I*

Oral anticoagulant therapy (INR 2.0–3.0) is indicated in patients with mitral stenosis and AF (paroxysmal, persistent, or permanent). (*Level of Evidence: C*)

Oral anticoagulant therapy (INR 2.0–3.0) is recommended in patients with AF and clinically significant mitral regurgitation. (*Level of Evidence: C*)

**Ways of reporting**

Percentages and numerator/denominator

**Secondary performance measure 8 :  
Proportion of AF patients who are given smoking cessation advice or counseling**

The proportion of AF patients with a history of smoking who are given smoking cessation advice or counseling

The history of smoking refers to that the patients smoked one year before hospitalization.

<b>Numerator</b>	<p>The patients with a history of smoking who are given smoking cessation advice or counseling</p> <p><b>Relevant data elements:</b></p> <p>In the smoking cessation advice or counseling, distribution of publicity materials="Yes", or making smoking cessation plans with patients/families="Yes", or prescription of anti-tobacco remedy</p>
<b>Denominator</b>	<p><b>Include:</b></p> <p>Patients with a history of smoking</p> <p>Relevant data elements:</p> <p>Smoking="Yes"</p> <p><b>Exclude:</b></p> <p>Expire during hospitalization</p> <p>Relevant data elements:</p> <p>Expire="Yes"</p>
<b>Evaluation time</b>	At discharge
<b>Data sources</b>	Case records
<b>Reasons for evaluation</b>	
NA	
<b>Guidelines</b>	
NA	
<b>Ways of reporting</b>	
Percentages and numerator/denominator	

**Figure S1. Organizational Framework and Governance of the CCC-AF Program**



NHFPC, National Health and Family Planning Commission of the People’s Republic of China;  
CHFP, Commission of Health and Family Planning; CSC, Chinese Society of Cardiology; AHA,  
American Heart Association