

Step	Action	Responsible Party
1	Acute episode of AF/flutter – patient either presented to ER, outpatient provider, or is an existing OHHV patient with acute AF/flutter issues — scheduler/RN places on APP AF Clinic schedule. All necessary documentation will be abstracted into EPIC prior to visit.	Scheduler/RN
2	Patient check in and given paperwork (including CHADS VASC and EHRA score form, Epworth Sleepiness Scale), meds reviewed, history reviewed, EKG performed and all documented in Epic	RN
3	Review diagnosis, pathophysiology, and treatment of AF/AFL with patient using iPad with CS Explorer App. Identify modifiable risk factors, review CHADS2 VASC score, etc., Fill out “My AF Clinic Plan”. -APP Start Redcaps database entry- RN	RN/APP
4	Acute AF/flutter management – duration less than 48 hours <ul style="list-style-type: none"> • Perform/order outlined diagnostics • If AF or atypical flutter, evaluate/order for cardioversion if within 48 hours of onset (device documented or on chronic AC) or set up for TEE or CT guided DCCV or just DCCV after 3 weeks of anticoagulation • If typical flutter, review EKG with EP physician. Setup for DCCV vs CTI ablation based on clinical scenario/patient preference. Consider for same day procedure. Same protocol as above for CT/TEE • Plan anticoagulation for a minimum of 1 month post CV/CTI RFA or chronically based on CHADS-VASc score. If new to AC, first dose in clinic prior to procedure. • If previous h/o a fib and has historically self converted in less than 48 hours, consider acute rate control and send home – follow-up if no conversion • If previous h/o AF and has not self converted in less than 48 hours then – NOAC followed by CV if stable enough to do as outpt or send to ER if quite symptomatic (ie patient in heart failure, needs inpatient diuresis, etc) • Consider appropriateness of starting antiarrhythmic medications or ablation for longitudinal care • Follow up should be requested with the EP physician (staffing physician if new or established EP physician). If non established patient, meet EP physician prior to end of visit or plan verbally discussed with rounding physician. 	APP
5	Acute AF/flutter management – duration greater than 48 hours <ul style="list-style-type: none"> • Perform Diagnostics • INR >= 2.0 for 3 weeks then plan CV or TEE or CT if INR labile/subtherapeutic, or unverified. • If on NOAC, must be completely adherent to dosing for three consecutive weeks before CV. Ensure it is therapeutically dosed. If subtherapeutic dosing, will need TEE or CT. • Plan anticoagulation for a minimum of 1 month post CV or chronically based on CHADS VASC score. • Consider appropriateness of starting antiarrhythmic medications or ablation for longitudinal care • Follow up visit should be requested with the EP physician (staffing physician if new or established EP physician). If non established patient, meet EP physician prior to end of visit or plan verbally discussed with rounding physician. 	APP
6	Paroxysmal (NSR at time of clinic visit) <ul style="list-style-type: none"> • Perform Diagnostics • Anticoagulate based on CHADS VASC score • If recurrent – decide on need for antiarrhythmic drug or ablation for longitudinal care • F/U visit with EP, Cardiology, or PCP pending appropriateness per APP 	APP

	<ul style="list-style-type: none"> If non established patient, meet EP physician prior to end of visit or plan verbally discussed with rounding EP physician 	
7	RN to place referrals (sleep medicine, bariatric center, Class III clinic, endocrinology). Written materials provided	RN

RMH Atrial Fibrillation Clinic Protocol

General

Tasks

- Confirm patient enrolled in Coumadin clinic or follows with PCP if warfarin initiated (RN)
- If plans to admit for Class III drug load, send message to EP physician Case Manager to arrange and contact Class III Clinic (RN)
- If plan for outpatient Sotalol load, attempt to schedule with Pharmacist prior to leaving, consider giving Rx for Sotalol to bring to Class 3 appt, labs if needed prior to appt, RN to place referral to Class 3 clinic
- Obtain Patient assistance for NOAC if needed by sending staff message to case manager. Use initial 30 day (if new) card (RN)
- Order diagnostics RN (cardiac monitor, stress, echo, etc)
- Letter sent to referring provider (ex ED APP and physician, surgical center provider, ANYONE who sent pt regardless of specialty), PCP and Cardiologist (if established) with visit and care plan (APP)
- Referral for OSA. Place Ambulatory Referral to Sleep Medicine, site based on insurance/patient preference. Place contact info on AVS. Print and fax referral (RN)
- Referral to Bariatric: Referral to Medical Weight loss. Written pamphlet to be handed out and printed copies of the cost structure for the medical weight loss program. RN to follow up with phone call to patient in 2-3 weeks to ensure patient was contacted and to encourage attendance
- Patient education given and reviewed with patient (HTN, OSA, AF handouts) RN

Staffing Physician (if non established with EP)

- 1st Choice- Rounding Physician
- 2nd Choice- Available EP lab Physician if rounding physician unavailable

Testing

Diagnostics – results to APP, reviewed and then send to RN to call patient

- Echo – look for structural heart disease/ left atrial size if not done in 12 months or symptoms suggest change in LVEF
- EKG – confirm existence of a fib/flutter currently
- 24 hour Holter – if persistent and need to assess ventricular rate control (goal: rest 60-90, activity <120)

- MCOT/EM – if paroxysmal, can evaluate either burden, rates with AF or correlation with Symptoms. Use post cardioversion or ablation to see for recurrence to help guide therapy.
- Labs – Thyroid studies; CBC, CMP if not done within 6 months (or if starting NOAC), PT/INR if starting warfarin
- Stress test - >50 yo or h/o CAD, or 1 risk factor for CAD, or symptoms suggestive of ischemia (cp, SOB, etc.) or any patient with consideration of starting Class IC. If planning ablation and no prior or recent (within 3 years) ischemia evaluation.

Treatment

Rhythm vs Rate control

- Everyone deserves initial opportunity to cardiovert (unless contraindication or clinical scenario makes this a poor option)
- Evaluate symptoms
- Ejection fraction that may be low secondary to arrhythmia

Rate Control Agents

- Beta Blockade (BB) – Metoprolol Succinate (Toprol XL) in qd or bid fashion – usual starting dose is 25mg po qd (If patient on carvedilol, may try to increase this dose, but often not terribly effective at rate control)
- Calcium Channel Blocker (CCB) – Diltiazem CD (Cardizem CD) in a qd or bid fashion – usual starting dose is 120 mg po qd (may only tolerate once daily dosing if BP low)
- Digoxin – very poor first choice, but may require in conjunction with BB or CCB (usual first dose is 0.125mg daily based on renal function)

Anti-arrhythmic Therapy (discuss with EP physician and all patients must be referred to Class III clinic)

- **No CAD or Significant Structural heart disease & normal QTc (can use either)**
 1. Flecainide 100mg BID (may start with 50mg bid in women under 60kg) with BB or CCB
 - a) Pill in the pocket - Flecainide 300mg + CCB or BB.
 2. Propafenone IR 150-300 mg q 8, EP 225-450 PO q 12
 - a.) Pill in pocket 450 mg (weight < 70 kg) or 600 mg (weight > 70 kg)

Pill in Pocket: If attempting this, order electrical cardioversion to allow patient to be monitored in pre procedure area. Administer pill in pocket dose in AF Clinic and send to PCU for telemetry monitoring. Electrical cardioversion will be cancelled if converts pharmacologically.
- **H/o CAD or has Structural Heart Disease**
 1. Amiodarone – typically 400mg po bid x 10 days followed by 200mg po daily thereafter
 - a. Must counsel patient on risks and benefits of this agent (toxicities) and initiate baseline testing (TFT's, LFT's, CXR, PFT's)
 2. Sotalol- not to be used with uncontrolled or decompensated HF. Refer for outpatient loading with Kardias 6L with Class 3 pharmacist protocol or inpatient admission if outpatient protocol contraindicated or patient/clinician preference

3. Tikosyn – refer to EP case manager for cost and inpatient admission (review with patient availability to use GoodRX or CostPlusDrugs.com)
For Class III admissions, depending on timing will be arranged either by AF Clinic RN or EP Case manager. Review home meds and look for any meds that will need to be discontinued (commonly HCTZ, Seroquel, certain antidepressants)

Follow-up

Follow-up physician (established)

- EP doc if established
- NI or INT Cardiologist if patient was only referred for risk factor modification or hospital follow up (NOT for AF management) and do not anticipate needing an EP (single, provoked episode, etc)

Follow-up physician (new patient)

- EP which staffed the visit. If rounding physician does NOT perform left atrial ablation and patient is appropriate for ablation, staff with alternative physician

Follow-up Timeline

- If new patient, plan for f/u in 6 weeks
- If established patient, plan for physician f/u in 1-12 months pending clinical need