Atrial Fibrillation Terminology

- NON-VALVULAR vs. VALVULAR HEART DISEASE — Patients with atrial fibrillation may or may not have valvular heart disease. This issue is of particular importance in choosing antithrombotic therapy and we will discus it later
- In 2014 the AHA/ACA guidelines did away with the terms acute and chronic and replaced them with the following classifications…

Classification of AF

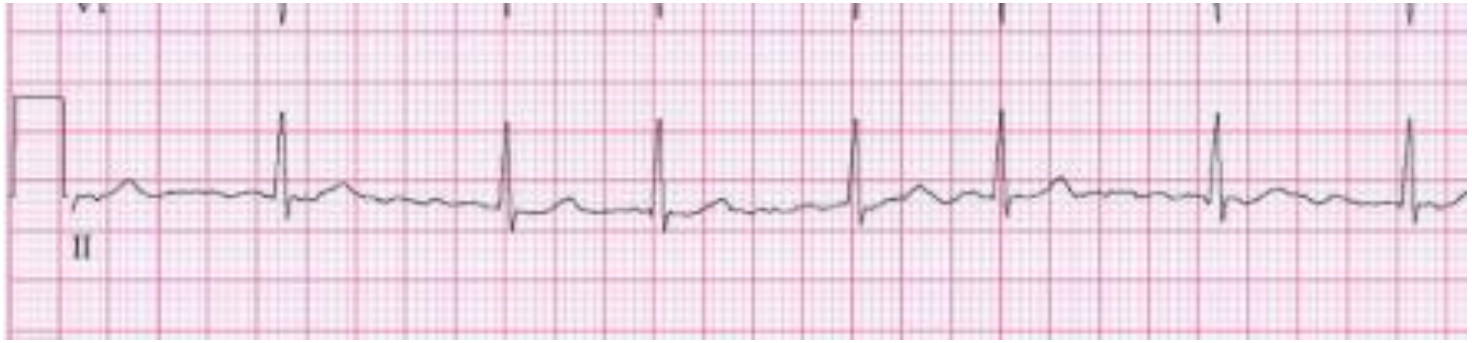
- **Paroxysmal AF** – Paroxysmal AF is defined as AF that terminates spontaneously or with intervention within seven days of onset. Episodes may recur with variable frequency.
- **Persistent AF** – Persistent AF is defined as AF that fails to self-terminate within seven days. Episodes often require pharmacologic or electrical cardioversion to restore sinus rhythm. While a patient who has had persistent AF can have later episodes of paroxysmal AF, AF is generally considered a progressive disease.

Classification of AF

- **Long-standing persistent AF** – AF that has lasted for more than 12 months.
- **Permanent AF** – "Permanent AF" is a term used to identify individuals with persistent atrial fibrillation where a joint decision by the patient and clinician has been made to no longer pursue a rhythm control strategy.

Making the Diagnosis: EKG findings

- There are no distinct p waves.
  - While atrial activity suggestive of p waves may be seen, there are no distinct p waves
- The RR intervals follow no repetitive pattern



When the EKG is not clear…

- Many variables can effect an EKG and make the diagnosis of AF challenging.
- You have a team of CCN Cardiology experts ready to help!
  - AAMG Cardiology # **443-481-6700**
  - Cardiology Associates # **443-573-6480**
  - Did you know you can send a picture of an EKG securely to cardiology using HALO?

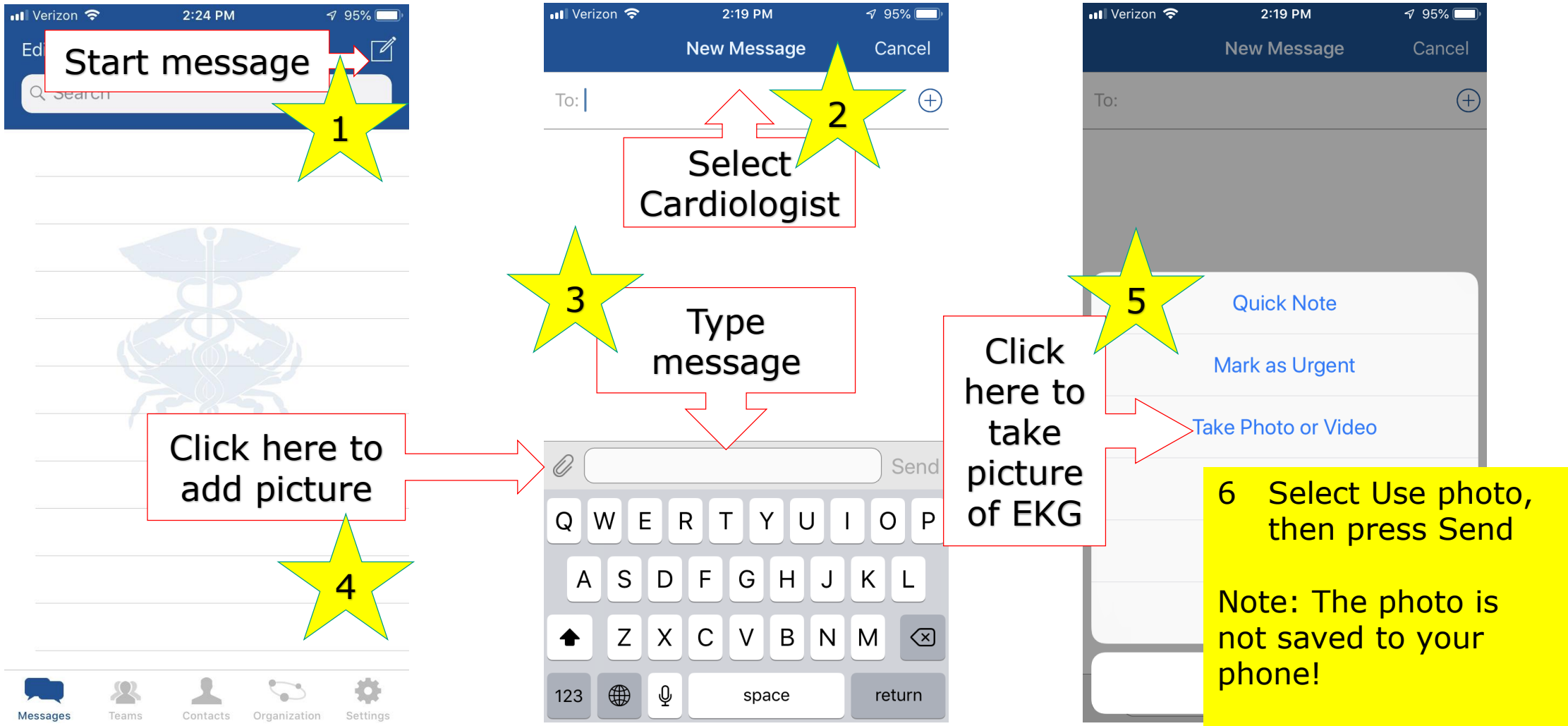
HALO -- The CCN's secure texting tool

- If you do not have HALO
  - Call the CCN at 443-481-6619 OR
  - Email aamccollaborativecarenetwork@aahs.org

Do it now!

We will wait for you….

Using HALO to send a secure EKG



Obtain the CHA_2DS_2-VASc Score

_____ CHF: (1point)

_____ Hypertension history (1point)

_____ Age <65 (0 point) 65-74 (1point) >75 (2points)

_____ Diabetes (1point)

_____ Sex (female =1 point; Male = 0 points)

_____ Stroke History (2 Points)

_____ Vascular Disease History (1 point)

_____ Total

Online Calculators are available

https://www.mdcalc.com/cha2ds2-vasc-score-atrial-fibrillation-stroke-risk

Stroke risk based on CHADS2VASC score

CHA_2DS_2-VASc acronym	Unadjusted ischemic stroke rate (% per year)*
0	0.2%
1	0.6%
2	2.2%
3	3.2%
4	4.8%
5	7.2%
6	9.7%
7	11.2%
8	10.8%
9	12.2%

* These unadjusted (not adjusted for possible use of aspirin) stroke rates were published in 2012[1]. Actual rates of stroke in contemporary cohorts might vary from these estimates.

For comparison: In most contemporary studies, the risk of a significant bleeding event on anticoagulation is about 0.2 to 0.4 percent per year

Bleeding risk: HAS-BLED score

- You can use the HAS-BLED risk score to estimate a patient's bleeding risk
- It should be noted that this scoring system does not differentiate type of bleeding and can be challenging to use this tool to compare risk of a significant or fatal bleeding event (on AC) to risk of stroke (when not on AC).
- Link to HAS-BLED score

https://www.mdcalc.com/has-bled-score-major-bleeding-risk

Using "DOAC" therapy

Agent	Standard	Low Dose	Average COST/month**
Dabigatran (Pradaxa)	150 bid	75 bid if CrCl 15-30	**$418.00**
Rivaroxaban (Xarelto)	20 mg QD (with evening meal)	15 mg QD if CrCl ≤ 30	**$460.00**
Apixaban (Eliquis)	5 mg bid	2.5 mg if 2 or more are true for patient Age ≥80 Weight ≤60Kg Creatinine ≥1.5	**$460.00**
Edoxaban (Savaysa)	60 mg QD if CrCl >50 and ≤95 mL/min	30 mg QD if CrCl >15 and ≤50	**$380.00**

*Review prescribing information regarding additional adjustments for Pradaxa

**Monthly cost for cash paying patients estimated using Good Rx 1/2019

Review new onset Atrial Fibrillation

- Patients in distress should be transferred to ER
- Perform EKG (Consult Cardiology if needed)
- Evaluate if patient is appropriate for outpatient management based on symptoms and medical conditions
- Evaluate for rate control
- Perform CHADS2VASC score
- Initiate oral Anticoagulation when appropriate
- Order BMP, CBC, TSH/T4
- Cardiology referral

Case 1

- J. is a 61 year old female diabetic presenting for a wellness visit. Her hypertension is controlled on lisinopril. BP is 126/78 Pulse is 96bpm. She has no history of CHF, CVA, lung disease, or vascular disease. She does not drink alcohol. She notes some increased fatigue but is otherwise without complaints. She has no Chest Pain. You notice an irregularly irregular pulse. No murmur. EKG confirms atrial fibrillation.
- What are next steps?

Case 1

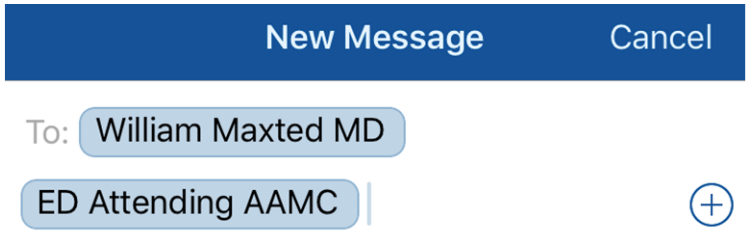
- J. is not in distress.
- Evaluation reveals no concerning symptoms of CAD/CHF/valvular disease or CVA.
- She is appropriate for outpatient management
- There are no obvious precipitating factors
- Her rate is 96. Goal pulse will be under 80. You can consider starting rate therapy as her blood pressure is stable and she has no evidence of CHF. She will be seeing cardiology soon so you can also delay this until after that visit. Then you can decide with cardiologist what is the best rate controlling medication for your patient.

Case 2

- B. is a 68 y/o male with a history of hypertension and CAD. He been having dyspnea on exertion reports orthopnea. He has been drinking a lot over the holidays. His legs have been swollen. His pulse is 112. His BP is 150/96. He denies Chest pain. Exam reveals bibasilar rales.
- EKG confirms atrial fibrillation
- What are next steps?

Case 2

- You transfer B. to care of the Emergency Department
- B. has new onset AF with signs and symptoms of heart failure
- He is not appropriate for outpatient management of new onset AF
- You send a note to his cardiologist and AAMC ED attending using HALO



- You will see B. for follow up after hospital visit.

If You're Not Sure the Patient Will Follow Through with Your Referral to These Resources. . .

- Call One Call Care Management and let them know that this patient may need extra help making and keeping an appointment with smoking cessation counseling.
- Contact phone number: 443 481 5652

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