Introduction

Under treating with oral anticoagulation (OAC) in patients with atrial fibrillation (AF) was found in various health care settings nationwide despite stroke risk.

Lack of awareness of stroke risk in AF

1. Lack of awareness of stroke risk in AF
2. Time constraint for patient education in PCP clinic
3. Concern with potential bleeding (physician’s and patients’ fear)
4. Knowledge gap on availability, efficacy and safety of direct oral anticoagulants (DOACs) compared to Warfarin
5. Uncertainty of availability, usage, efficacy and safety of reversal agents
6. Lack of compliance with OAC therapy
7. Difficulty in maintaining INR or lack of compliance in INR monitoring
8. Lack of knowledge on which extent of AF burden is required to be treated with OAC to prevent stroke
9. Concomitant use of dual antiplatelet therapy

Problem Statement

16% of patients with CHA2DS2-VASc score ≥2 were not on appropriate OAC therapy in resident clinic in Orlando VA Medical Center.

Definitions

Appropriate: OAC use for non-valvular AF in patients with CHA2DS2-VASc score ≥2

Inappropriate: No OAC use for non-valvular AF in patients with CHA2DS2-VASc score ≤2

Method

Extensive chart review was performed in 240 AF patients belonging to resident clinics throughout 2017 to identify barriers to OAC therapy.

Barriers Identified

1. Inability to re-calculate the score each visit or at least once a year.
2. Patient time constraint for patient education in PCP clinic
3. Prolonged time for patient education in PCP clinic
4. Concomitant use of dual antiplatelet therapy
5. Uncertainty of availability, safety, efficacy and reversal agents of OAC

Progress After Education

72% of residents would not hold off from initiating OAC therapy when the HAS-BLED score is high (7-9) but 26% said they would
19% would still hold off on OAC therapy for patients with high HAS-BLED score, but 96% would not
82% of residents were mostly comfortable initiating OAC therapy, while 24% were mostly uncomfortable, 3% were always uncomfortable, 9% were mostly uncomfortable
89% of residents became more comfortable than they were before in managing OAC therapy
84% of residents were very familiar with relative and absolute contraindications to OAC therapy, while 21% were only somewhat familiar and 3% were never familiar at all

Future Process Map

Why are of CHA2DS2-VASc score calculated wrong?

Nway L. Ko, MD

When patient turns 65, 65% seem to have stopped taking OAC due to patient refusal or absence of OAC due to refusal by patients without adequate education by providers.

Phase I: Education of residents on CHA2DS2-VASc score calculation

To help residents evaluate appropriateness of OAC therapy in patients with Atrial Fibrillation (CHA2DS2-VASc score ≥2) and many clinical scenarios.

Phase II: Development of decision making model for CHA2DS2-VASc score calculation in residents

To help residents evaluate appropriateness of OAC therapy in patients with Atrial Fibrillation (CHA2DS2-VASc score ≥2) and many clinical scenarios.

Phase III: Development of management of bleeding risk

To help residents evaluate appropriateness of OAC therapy in patients with Atrial Fibrillation (CHA2DS2-VASc score ≥2) and many clinical scenarios.

Phase IV: Education of residents on using and management of bleeding risk

To help residents evaluate appropriateness of OAC therapy in patients with Atrial Fibrillation (CHA2DS2-VASc score ≥2) and many clinical scenarios.

Phase V: Reduction in rate of inappropriate OAC therapy by 50% by the end of academic year (by 30 June, 2019).

References

4. Hatala, R., Poonam Kalidas MD, Sundeep Kumar MD, Hiren Patel MD, Jennifer Thompson MD. (2019). Overcoming the Barriers to Oral Anticoagulation Therapy in Patients with Atrial Fibrillation with High Risk of Stroke in Resident Clinics from Orlando VA Medical Center. University of Central Florida College of Medicine, Orlando VA Medical Center.

Goal Statement

Increase in appropriate resumption of OAC after procedure through clinical reminder or recurring pop-up screen notification starting at 5 days of OAC discontinuation.

Future Process Map

Changes Aimed and Action Plans

1. Increase in primary care physician (PCP) engagement in informing and educating patients on stroke risk, bleeding risk and rationale of OAC therapy along with careful monitoring for bleeding as well as interventions to reduce bleeding risk by education of residents in Orlando VA Medical Center.
2. Promote accurate calculation of CHA2DS2-VASc scores by educating the residents with case based exercises and problem solving through clinical scenarios.
3. Increase in interval recalculation of CHA2DS2-VASc score by educating residents as well as by planning to implement clinical reminder to recalculate the scores each visit or at least once a year.
4. Improve rate of utilization of anticoagulation clinic for monitoring of patients on OAC by pharmacy in addition to primary care visits.
5. Increase in appropriate resumption of OAC after procedure through clinical reminder or recurring pop-up screen notification starting at 5 days of OAC discontinuation.
6. Promoting comprehensive care through resident “Active Panel Management” approach. Residents will be given a dedicated half day patient education session during which they will be provided with their list of patients with AF. Residents can evaluate appropriateness of OAC therapy.

Progress After Education

Residents Survey

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References