Karaoui et al. Impact of pharmacist-conducted anticoagulation patient education and telephone follow-up on transitions of care: a randomized controlled trial

FOLLOW-UP TELEPHONE CONTACT

-	٠	-	ı
,	1		

Contacts	
Name of Contact 1:	
Relationship:	
Caregiver? (Y/N)	
Proxy? (Y/N)	
Designated to receive followup phone call? (Y/N)	_
Notes:	
Preferred Spoken Language	
Interpreter needed?(Y/N)	
Preferred phone number: home cell phone	work
Home Phone: ()	OK to leave message? (Y/N)
Best time to call:	
Cell Phone: ()	OK to leave message? (Y/N)
Best time to call:	
Work Phone: ()	OK to leave message? (Y/N)
Best time to call:	

Karaoui et al. Impact of pharmacist-conducted anticoagulation patient education and telephone follow-up on transitions of care: a randomized controlled trial

PART I: Patient Demog	graphics										
Patient Identification Number (MRN)	Year of Birth	Gender □ M □ I	,	Smoker □ NO	Weight (Kg): Height (cm):		Insurance type ☐ Private	□ Publi	c	□ None	
,				□ YES	BMI (Kg/ m ²):	_		_ 1 001		_1,0110	
Allergies Date of Admission: d			dd/mm/yr	Chief complaint	Admission Diagnosis		Date of Discharge:		Hospita	ıl LOS(d):	
☐ NO ☐ YES Inclusion Criteria:		dd/mm/yr Exclusion Criteria:	 •								
☐ Age > 18 years, discharged on any therapeutic anticoagulant including vitamin K antiagonists, non-vitamin K antagonist oral								☐ Patients discharged on anticoagulants for			
anticoagulants (apixaban, ri	ivaroxaban, dabig	atran), or parenteral	anticoagulant	for reasons other than ven	ous thromboembolism		thromboembolism prophylaxis ☐ Orthopedic thromboprophylaxis				
prophylaxis. Discharge anticoagula	ation counseling	documented on par	ient and fami	lly education form in the	medical record		☐ Prescribed treatm			s than 1 month	
		-		Patients who had recently							
also included if they w	ere on therapeution	anticoagulation for	a non-surgical	I indication.							
Indication for Anticoagul	ant		Antiplate	elet use on admission		Ant	ticoagulant prescribed	d on dis	charge		
☐ Atrial Fibrillation			□ NO	\square YES			Acenocoumarol (sintrom)				
☐ VTE treatment				Specify antiplatelet therapy				1			
☐ Other			aspirin 80-100mg				Tinzaparin				
				□ aspirin > 162-325mg □ clopidogrel 75mg				Fondaparinux			
Prescribing Service	□ Neur						Apixaban				
☐ Cardiology		opaedic Surgery	□ prasug □ ticagre				Rivaroxaban				
☐ Family Medicine☐ Haematology/Oncology	☐ Pulm	ic Surgery	☐ dual ar				Dabigatran				
☐ Infectious Diseases		ular Surgery		itipiatelet			Fluindinedione				
☐ Internal Medicine		r	Creatinin	e clearance closest to the	date that the		Hydroxycoumarol	(warfar	rin)		
Internal Wedleme							Other				
l ml/min							ticoagulant Dose			(mg or units)	
						Fre	equency				
							Once daily				
							Bid				
							Q 48 hours				
							Other				

Karaoui et al. Impact of pharmacist-conducted anticoagulation patient education and telepl	none follow-up on transitions of care: a randomized controlled trial
DADWHM P. LIV.	
PART II Medical History	
PART II.i Bleeding Risk in Anticoagulated Patients with Atrial Fibrillation base (In the final score, only add up the major points)	ed on the HAS-BLED RISK SCORE: TOTAL SCORE
1 point/ risk factor	
□ Hypertension	☐ Bleeding history
☐ Abnormal renal function	or predisposition (anemia)
☐ (chronic dialysis	☐ Labile INR (Therapeutic time in range < 60%) ☐ Elderly (greater than 65 years old)
☐ renal transplant ☐ serum creatinine ≥ 2.3 mg/dL (200 μmol/L)	☐ Drugs
☐ Abnormal liver function	☐ (other antiplatelet agents
(cirrhosis	or NSAIDs)
□ bilirubin > 2x UNL with AST/ALT/AP > 3x UNL)	☐ Alcohol (more than 8 drinks per week)
□ Stroke	•
Medical Conditions:	
□HTN □Dyslipidemia □CHF □Asthma □COPD □GERD □DVT □Arthritis	□ anemia □ HAS-BLED ≥3
□Seizure □CKD □Depression □Constipation □Insomnia □Parkinson □Alzheimer	☐ genetic factors(CYP2C9 polymorphism) ☐ ≥65 years
□Cancer □DM □ History of bleeding □Other	\Box an excessive risk of falls \Box \geq 75 years
☐ Age> 65 years	\Box Recent surgery on critical organ (brain; \Box ≥ 80 years
☐ history of gastrointestinal bleeding	eye) \square Weight<60 (Kg)
history of stroke, and at least one of the following variables: myocardial infarction,	☐ Thrombocytopenia (e.g. chemotherapy) ☐ reduced platelet count or function
hematocrit< 30%, creatinine >1.5 mg/dL, and diabetes.	□ hypertension (uncontrolled)
□ prior bleeding	

Karaoui et al. Impact of pharmacist-conducted anticoagulation patient education and telephone follow-up on transitions of care: a randomized controlled trial ☐ Previous Surgical History: hepatic or renal disease ethanol abuse malignancy age>75 years **PART III: Counseling Documentation** REFER TO THE MULTIDISCIPLINARY PATIENT & FAMILY NOTE Refer to the Hospital Discharge Summary of Was the specific anticoagulation counseling documented Discharge anticoagulation counseling performed by: **Unified Prescription:** on oral anticoagulation documentation form: □NO Student pharmacist \square NO \square YES $\Box YES$ Were the discharge medications available? ☐ NO Faculty \square NO \square YES \Box YES Full time clinical pharmacist \square NO \square YES Were the specific patient Learning Needs identified $\square NO \square$ Hospital pharmacist \square NO \square YES YES If yes, Discharge medications available on Nurse \square NO \square YES Rationale for therapy \square NO \square YES (select all that apply): Physician \square NO \square YES \square NO \square YES Dosing ☐ Discharge summary ☐ Unified prescription Were the following criteria filled on the patient and family education \square NO \square YES Monitoring □Other \square NO form INR \square YES Was the Learner specified: ☐ NO \square YES \square NO \square YES Duration of therapy Pre-specified time period for next appointment or Patient \(\subseteq NO\) \square YES \square NO \square YES Administration contact with physician is specified (Health care Family □ NO \square YES professional communicated this information with the Other \(\sup \ NO \) \square YES Importance of compliance \square NO \square YES patient \(\subseteq \text{NO } \subseteq \text{YES}, \text{ specify date and calculate} \) How to handle a missed dose ☐ NO \square YES Was the counseling Method specified : \square NO \square YES days post discharge \square YES Storage \square NO ☐ YES Verbal □ NO \square NO Drug-Drug interaction \square YES Instructions Sheet

NO \square YES Emergency contact number provided to patients Drug-Food interactions \square NO \square YES Language of Written material Education: in case of any issues with barriers in care (ex. physician number or hospital number) English \square NO \square YES \square NO \square YES Common side effects Arabic \square NO \square YES \square NO \square YES \square NO \square YES Signs/Symptoms of Bleeding and Clotting Not documented \square NO \square YES Reversal agent \square NO \square YES Other Information (May be found in the General precautions / patient safety issues \(\square\) NO \square YES Multidisciplinary or Anticoagulation education Was the Response of Patient documented: \square NO \square YES Communication with healthcare provider (follow-up, planned Verbally communicated any ambiguities with the Verbalized understanding ☐ NO \square YES \square NO \square YES surgeries, etc) primary physician that arose during counseling the patient.

NO \square YES Needs reinforcement; re-evaluate education at another time NOTES: \square NO \square YES Demonstration of patient ability and comfort to selfadminister parenteral anticoagulant □ NO □ YES \square YES Instructions declined \(\subseteq \text{NO} \)

Did the educator document in the section of Barriers to Learning:

 \square YES

 \square NO

Recommendations:

Assurance of affordability, insurance coverage and

retail availability of anticoagulant therapies

Karaoui et al. Impact of pharmacist-conducted anticoagulation patient education and telephone follow-up on transitions of care: a randomized controlled trial

Age Related	□NO	□ YES			□ NO □ YES
Cognitive	□ NO	□ YES			
Cultural	\square NO	□ YES		ich time did the pharmacist allocate to counseling the	Appropriate and accurate prescriptions given to
Emotional	\square NO	□ YES	patient	<u> </u>	patient prior to discharge ☐ NO ☐ YES
Hearing	\square NO	□ YES			Inpatient dosing history, discharge instructions and
Language	\square NO	□ YES			discharge summary sent to receiving provider in time
Reading	\square NO	☐ YES			to allow for receiving provider to effectively care for
Religious	\square NO	☐ YES			the patient \square NO \square YES
Visual	\square NO	☐ YES			
No Barrier	\square NO	□ YES			
PART IV: Discha	arge medicatio	ns and concomitant medications on	the disch	arge instructions sheet or the Unified Prescription:	LIST THE DISCHARGE MEDICATIONS
Medications poss	sibly affecting A	Anticoagulant dose:	Medica	ations possibly interacting with Vitamin K	(Available from Medications on discharge
☐ Concomitant us			antago		instructions sheet or the Unified Drug
☐ Strong CYP3A				Ciprofloxacin	Prescription:
☐ Verapamil cont		es		Amiodarone	1. <u>.</u>
☐ Diltiazem	8			Phenylbutazone	
☐ Quinidine				Alcohol (if concomitant liver disease)	2. <u>.</u>
☐ Amiodarone				Cimetidine	
☐ Dronedarone					3. <u>.</u>
☐ Clarithromycin	l			Boldo-fenugreek	
☐ Erythromycin				Anabolic steroids	4. <u>.</u>
☐ Carbamazepine	2			Cotrimoxazole	_
☐ Phenobarbital				Clofibrate	5. <u>.</u>
☐ Phenytoin				Piroxicam	
☐ St John's wort				Fish oil	6.
☐ HIV protease in	nhibitors (e.g. ri	tonavir)		Quilinggao	7
☐ Rifampicin	, 0	,		Zileuton	7. <u>.</u>
☐ Cyclosporin				Erythromycin	0
☐ Tacrolimus				Diltiazem	8. <u>.</u>
☐ Itraconazole				Citalopram	9.
☐ Ketoconazole				Mango	9.
☐ Posaconazole				Entacapone	10. <u>.</u>
☐ Voriconazole				Omeprazole	10. <u>.</u>
☐ Fluconazole				Fluconazole	11.
□ Naproxen				Fenofi brate	11.
				Sertraline	12. <u>.</u>
Antiplatelet use of				Isoniazid	12
	YES			Propafenone	13.
				Metronidazole	13.
Specify antiplate	let therapy			Propranalal	14

Karaoui et al. Impact o	of pharmacist-conducted an	ticoagulation patient education and tele	phone follow-up on transitions of care	a randomized controlled trial
□ aspirin 80-100mg □ aspirin > 162-325mg □ clopidogrel 75mg □ prasugrel 10mg □ ticagrelor 90mg □ dual antiplatelet □ NSAIDS □ STEROIDS		☐ Miconaz ☐ Sulfinpy ☐ Griseofu ☐ Cholesty ☐ Mesalan ☐ Barbitur ☐ High vit ☐ Mercapt ☐ Nafcillir ☐ Carbama	alvin vramine vramine aites amin K content foods/enteral feeds opurine azepine o (large amounts)	15. 16. 17. 17. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19.
Part V: Follow up 1 (table below) Follow up phone call wit □ NO □ YES		cument findings. If patient is readmitted &		art for follow up and document bleeding findings into the below.
Part VI: Follow up 2: the table below) Follow up phone call on □ NO □ YES		document findings. If patient is readmitted		chart for follow up and document bleeding findings into
Interpret the Bleeding		llow up 1&2) according to the deficiety of Thrombosis and Haemost		accordingly
Major bleeding		Clinically relevant non- major bleed	Minor bleed	
 ☐ Intracranial ☐ Retroperitoneal ☐ Intraocular ☐ Intra-articular ☐ Pericardial 	☐ Hg drop ≥2 mg/dl ☐ Fatal Bleed ☐ Transfusion > 2 units of PRBCs ☐ Spinal ☐ Intramuscular with	☐ Requiring medical intervention by a healthcare professional ☐ Leading to hospitalization or increased level of care ☐ Prompting a face to face evaluation	☐ Sign or symptom of hemorrhage that doesn't fit the definitions of major bleed and clinically relevant non-major bleed requiring just telephone or electronic communication without	□ BE on day# after discharge prescription: □ BE while on concomitant antiplatelet or on an anticoagulant other than the anticoagulant discharged on: yes or no

☐ Pericardial

Karaoui et	al. Impa	ct of phari	nacist-co	nducted ant	icoagulatio	on patien	t education	n and telep	phone follow-up of	on transitions of c	are: a randomiz	ed controlled	l trial	
		comp	compartment syndrome						needing to see the	ne physician	follow up Follow up	#1:#2:		
Mortality ☐ Mortality Date	□ yes □ y on day INR	No Rea	son for m	ortality:	Hct	Hb	SrCr	CrCl	Anticoccul	ation medication	o administrated			
Admission	1111	1.1	111	Tittelets	Tiet	110	Biei	Cici	Date /time	Agent	Dose	1	Frequency	
date										1180110	2000	110000	Trequency	
									Total number of doses received during inpatient stay					