



Acute Rehabilitation Transitions of Care: An analysis of gaps in timely deep vein thrombosis prophylaxis after intracerebral hemorrhage

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Background

•In 2019, a 71-year-old male patient was admitted to UCHealth Memorial Hospital Central after suffering an intracerebral hemorrhage (ICH). He was admitted to the acute rehabilitation unit 1 week after the event secondary to his functional deficits. On the unit, sequential compression devices were started, but the patient did not receive anticoagulation therapy for deep vein thrombosis (DVT) prophylaxis and he subsequently succumbed to a massive Pulmonary Embolism (PE).

•Literature shows that less than 20% of patients with ICH receive anticoagulation for DVT prophylaxis. However, some experts add low-dose low molecular weight or unfractionated heparin after 1 to 4 days from ICH onset for patients with decreased mobility for DVT prophylaxis. The risk of hematoma expansion, which may be increased in certain settings, may weigh against the use of anticoagulation.

- This 71-year-old patient's discharge paperwork from the hospitalist service did not discuss anticoagulation for DVT prophylaxis. There were no recommendations for or against anticoagulation nor any relevant timeframe for starting anticoagulation.

Objective

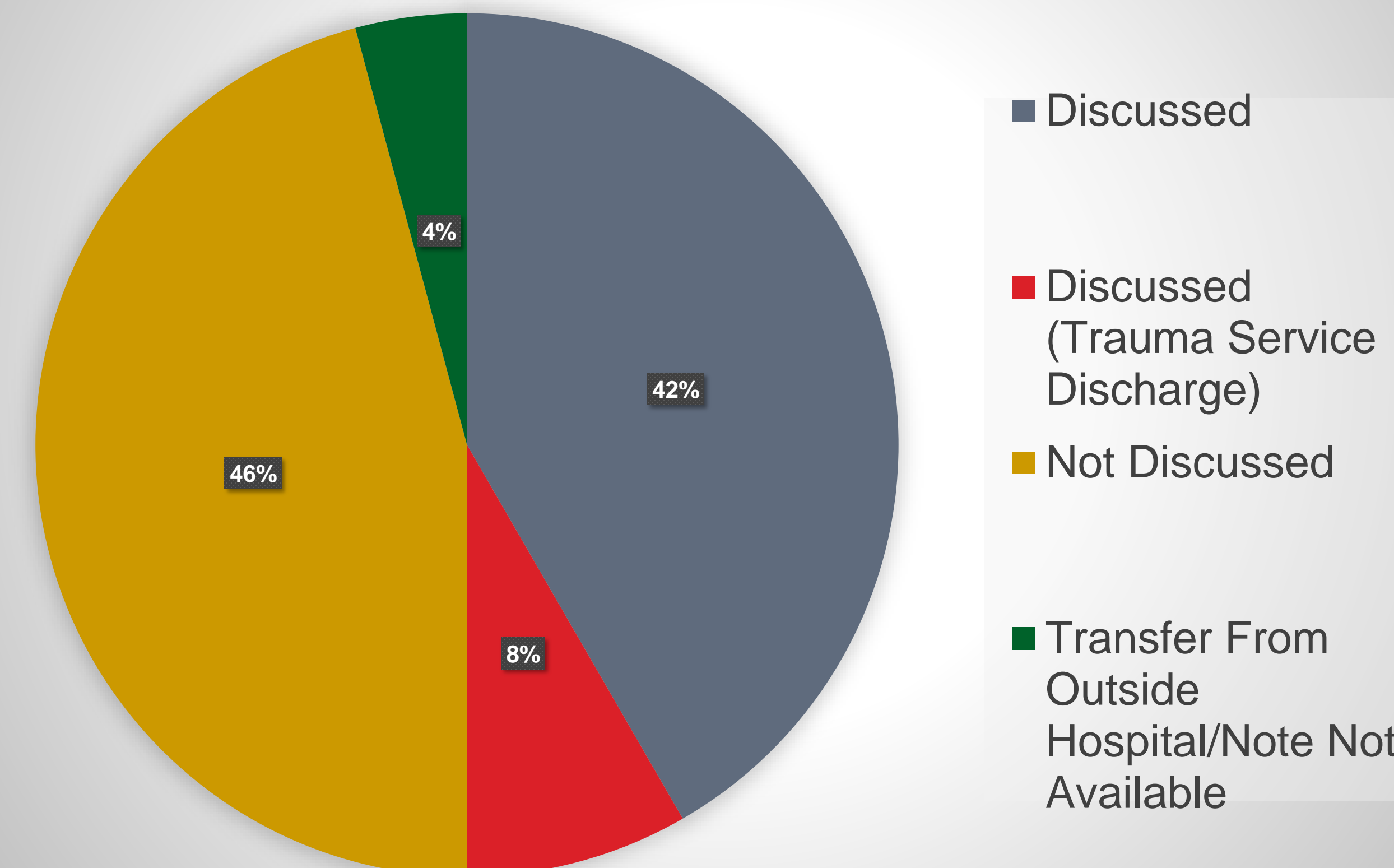
•We investigated what may have contributed to leading this 71 year old male patient to suffer a massive PE. Anticoagulation was not started and this was not addressed in the discharge paperwork. We endeavored to improve this transition of care to the rehabilitation unit, specifically regarding discharge communications.

Methods

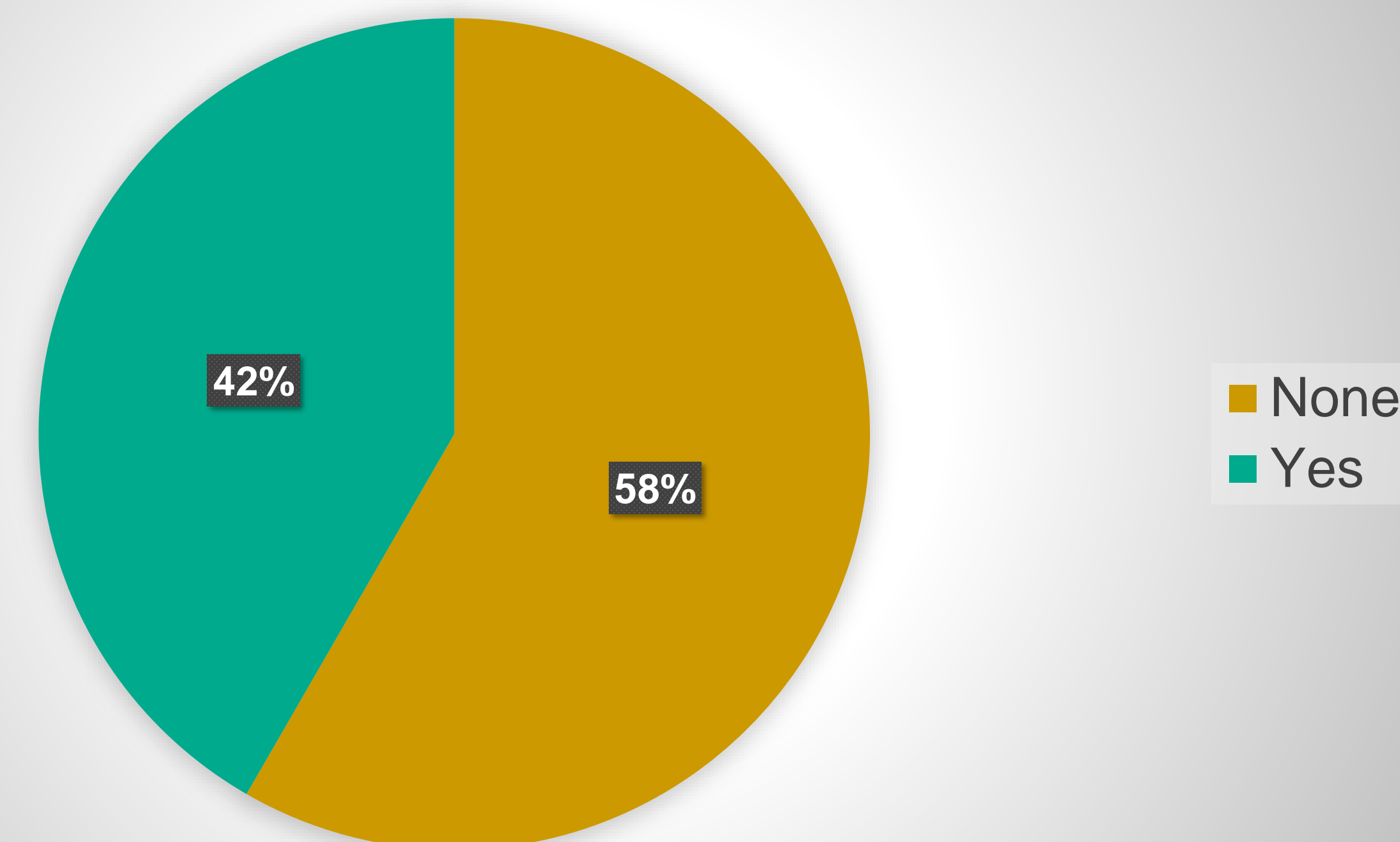
- We reviewed the charts of all patients discharged from the rehab unit from January 2019 through December 2019.
- For all patients with a diagnosis of ICH (n=24), we reviewed hospitalist and rehab H&P's and discharge notes to understand the course of clinical events.
- The hospitalist discharge summaries were then reviewed for any comments on DVT prophylaxis or anticoagulation.
- The charts were also reviewed for whether or not and when anticoagulation was started.

Results

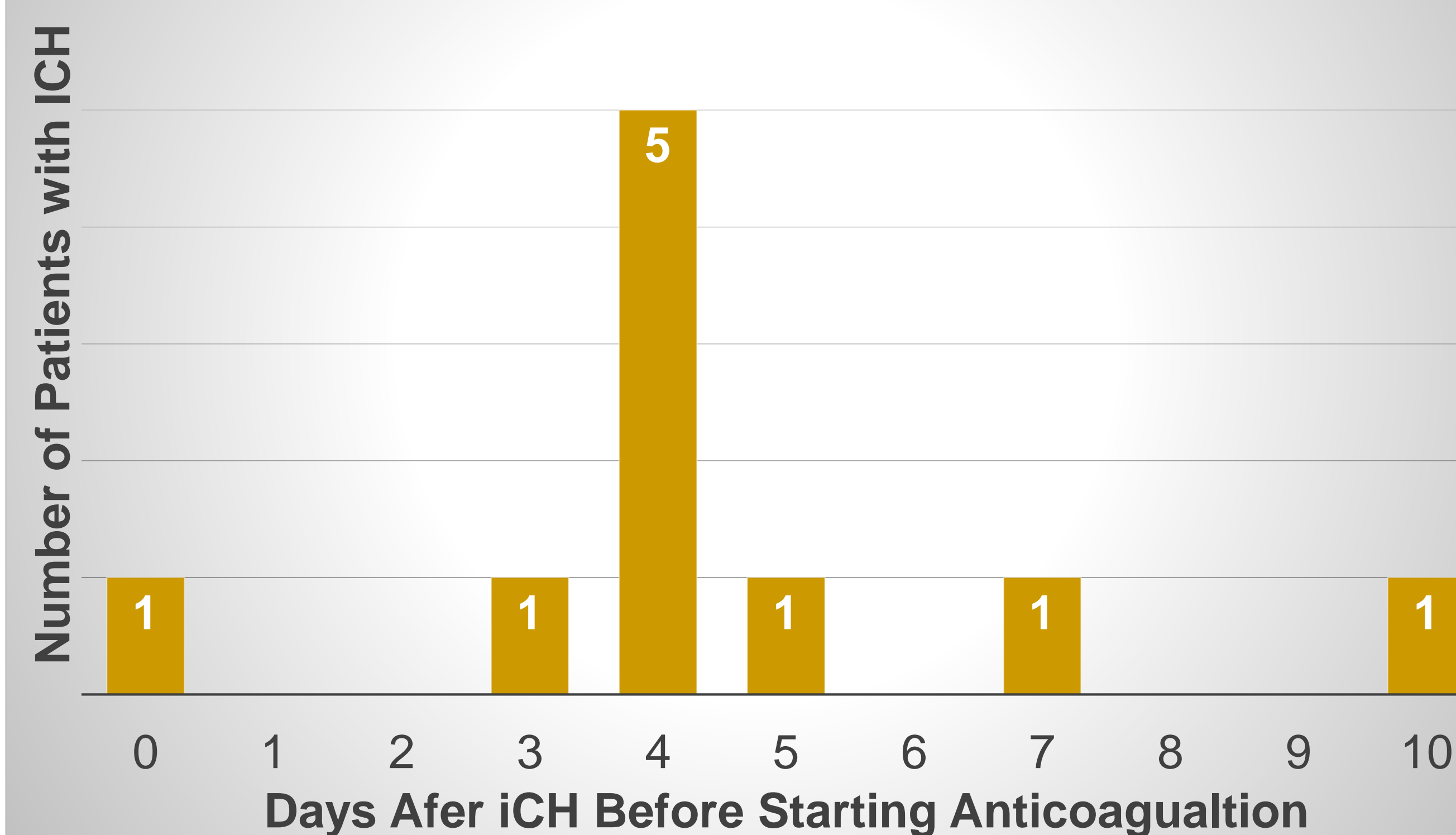
Hospitalist Discharge Note Discussed Anticoagulation



Anticoagulation Started



Days After ICH Until Anticoagulation Commenced



Discussion

- Patients with ICH are at high risk for DVT and PE, but anticoagulation was not discussed in 46% of the discharge notes for patients coming to the acute rehabilitation unit.
- When anticoagulation was started, this was within the recommended time frame of 4 days for 70% of ICH patients
- Discharge paperwork for patients going to the acute rehabilitation unit should include a discussion on anticoagulation recommendations, weighing benefits and risks
- Further investigation should be done on requiring dot phrases for ICH patient discharges or a specific acute rehabilitation discharge summary improves outcomes for patients with ICH and generally for the acute rehabilitation unit overall.
- A challenge encountered included finding all the patients with ICH. Often, patients with ICH do not have an ICD-10 code explicitly including this diagnosis, so individual charts for all patients with a discharge diagnosis that suggested a possible ICH were reviewed. Accuracy for a diagnosis of ICH was confirmed by reviewing imaging reports, progress notes from primary teams, and consult progress notes as needed.

Conclusions

- Patient's with ICH face high risks of DVT and PE. 46% of discharge summaries for ICH patients did not discuss anticoagulation, so addressing this communication gap in transitions of care may improve outcomes.
- Next steps include a presentation to the hospitalists reinforcing the importance of timely anticoagulation for patients with ICH as well as incorporating a dot phrase for templates for recommending/discussing risks of anticoagulation for the primary team discharging these patients to acute rehabilitation.
- A future step includes investigating the need for an acute rehabilitation unit specific discharge summary to help improve outcomes for this transition of care.

Reference

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