

# Rationalizing Coagulation Test Orders in Emergency Department Wexford General Hospital

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## Introduction

Coagulation profiles are ordered for a variety of conditions in ED. Cost-effectiveness and efficiency are of increasing relevance in hospital medicine. Ordering unnecessary coagulation studies is of concern in a Model 3 hospital due to ineffective utilization of resources with limited laboratory staffing. Adherence to practical guidelines should help effect clinical decision making, resource utilization and cost savings [1].

## Aim

To determine volume and appropriateness of coagulation tests ordered from ED

## Methods

Chart review of attendances between 2<sup>nd</sup>-8<sup>th</sup> March 2020 where coagulation studies requested. Appropriateness was determined by reference to clinical guidelines developed by consultants in the department [2].

## Results

Age distribution of patients with coagulation studies (Figure 1).

Flow chart of patients presented in a week (Figure 2).

Comparison of patients adhering to criteria for coagulation tests (Figure 3).

## Discussion

We found that there was no suitable indication for 68.6% of

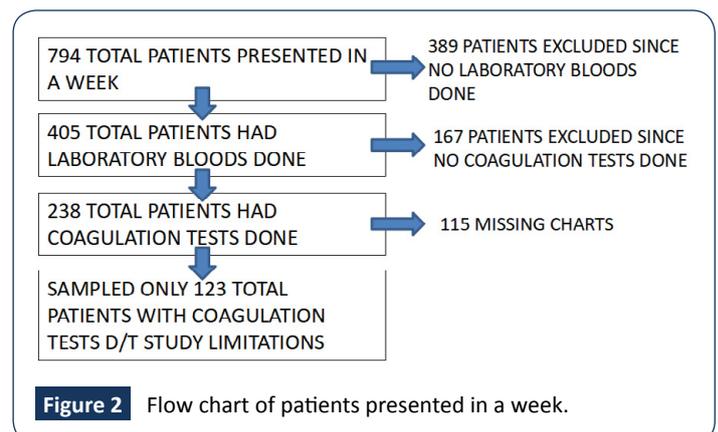
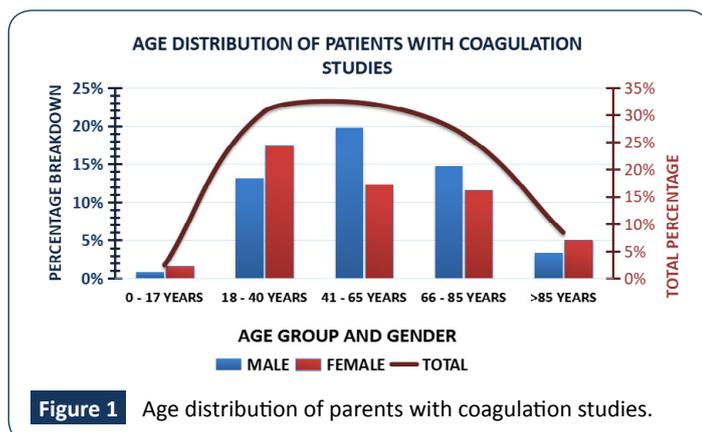
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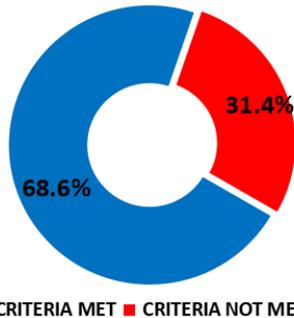
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**COMPARISON OF PATIENTS ADHERING TO  
CRITERIA FOR COAGULATION TESTS**



**Figure 3** Comparison of patients adhering to criteria for coagulation tests.

tests indicating significant wastage. The local cost for SINGLE coagulation test is 2.87 Euros [3]. Implementation of clinical guidelines, educational packages and/or algorithms in ED for nurses and physicians should reduce unnecessary coagulation testing [4]. This will enable effective utilization of laboratory resources as well as reduce financial cost. We desire at least 80% coagulation tests sent to be appropriate in Wexford ED thus further education and intervention is required [5].

### Limitations

Limitations of the study includes missing charts; possibly being utilized for other audits or presentations; charts removed from ED for early pregnancy unit; misfiling or other reasons. This warrants further review and electronic scanning and warehousing of charts should be considered to avoid potential medico-legal consequences.

### References

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