ROLE OF THE PHARMACY RESIDENCY ON-CALL PROGRAM IN MANAGEMENT OF DIRECT THROMBIN INHIBITOR (DTI) USE FOR HEPARIN-INDUCED THROMBOCYTOPENIA (HIT)

HealthCare

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Objectives

• To describe the role of a 24-hour on-call pharmacy residency program in the management of DTI use.

Background and Purpose

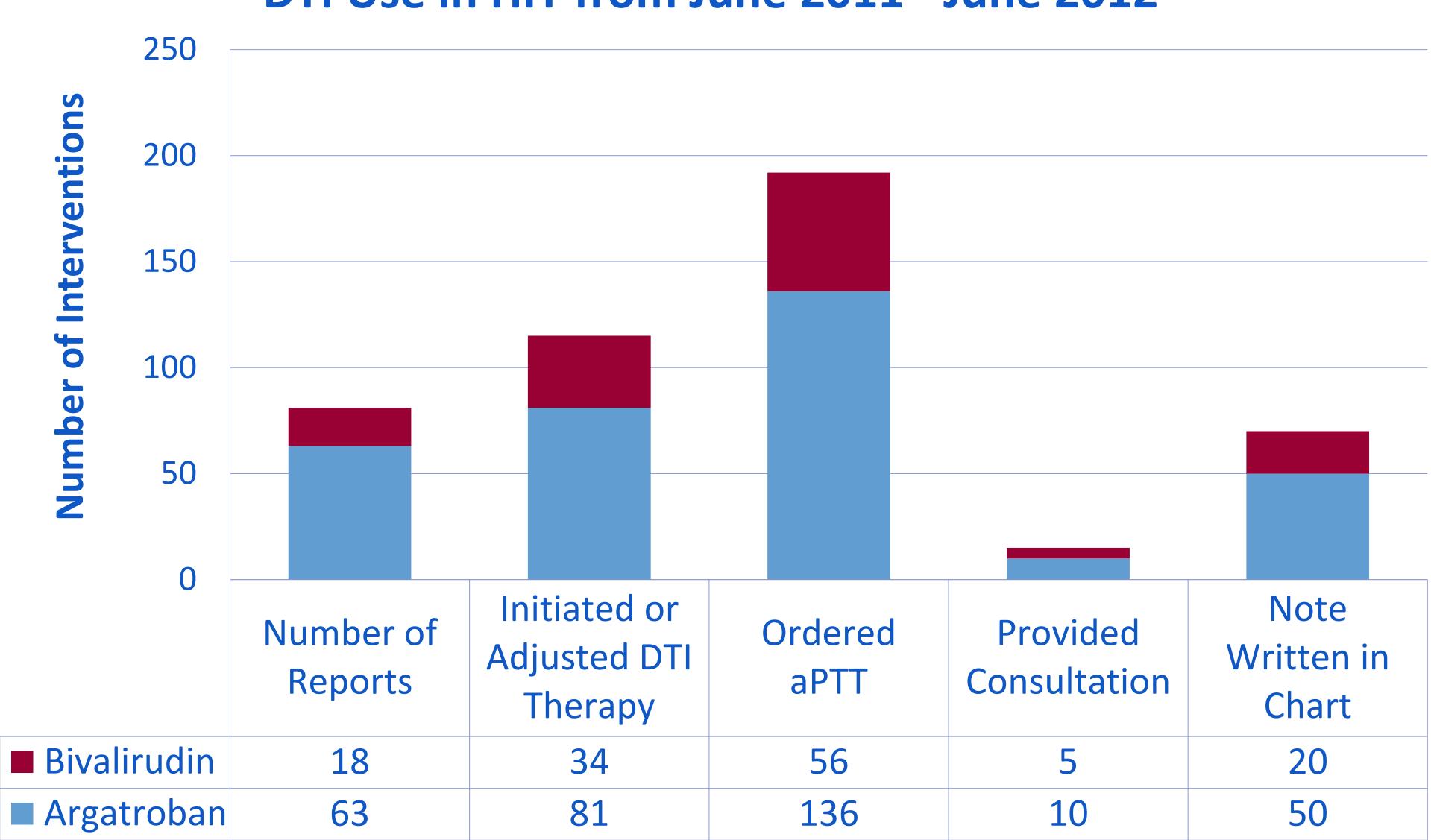
- DTIs are the drug of choice for patients with suspected or confirmed HIT.
- DTIs require close monitoring and frequent dosage adjustments to maintain within a narrow therapeutic range.
- Studies have shown that pharmacist-managed DTI programs can increase safety and efficacy.¹
- At University of Kentucky Chandler Hospital, pharmacy residents are trained to help manage DTIs as part of the 24-hour on-call pharmacy service.
- The purpose of this study is to provide a descriptive evaluation of the role of an on-call pharmacy residency program for the management of DTI use.

Study Design and Methods

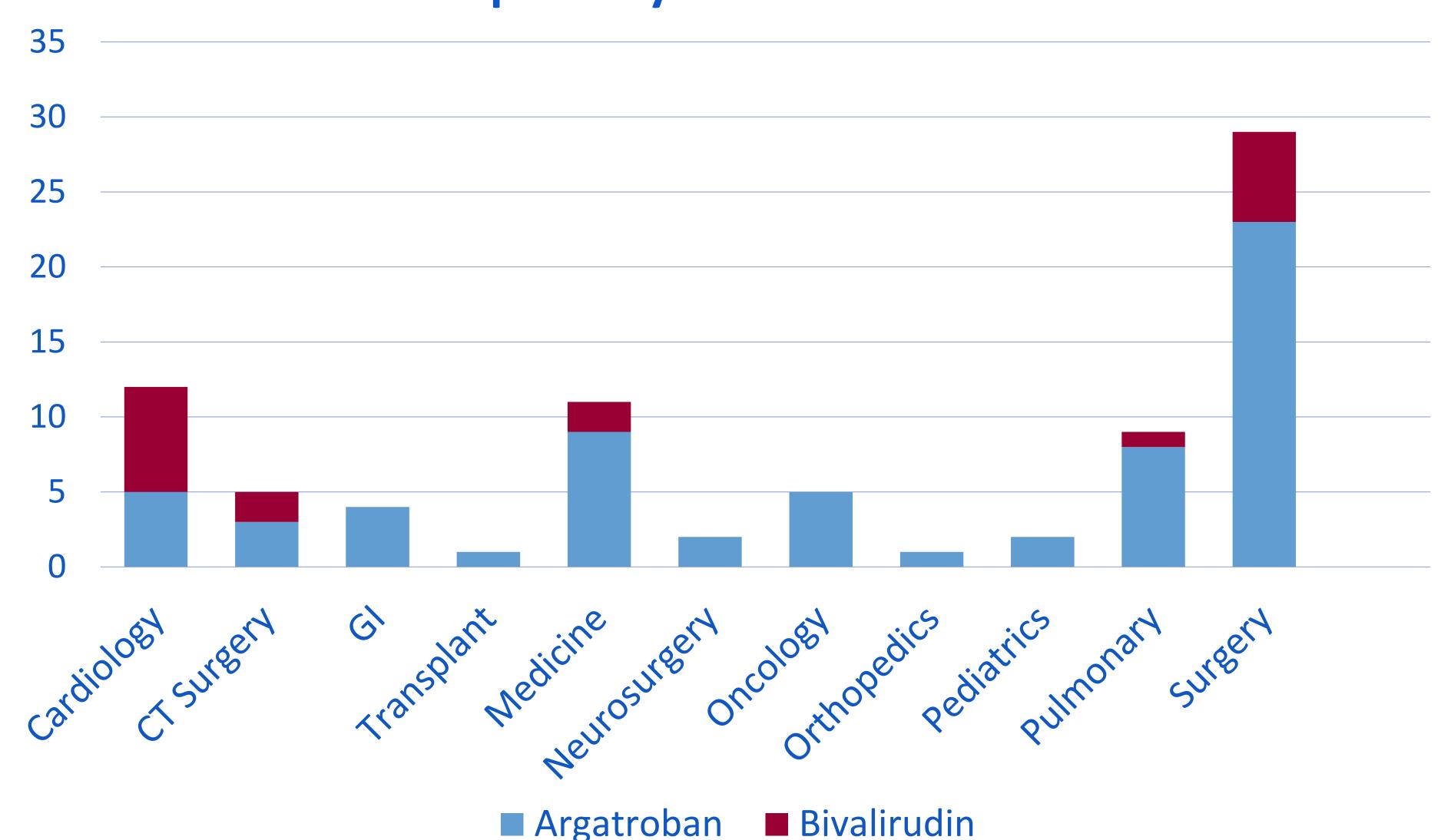
- A retrospective review of patient hand-off reports from the pharmacy resident 24-hour on-call service at University of Kentucky Chandler Medical Center from June 2011 thru June 2012 were reviewed.
- Reports were categorized by the purpose, time, origin, and topic of the call.
- Data from each report were entered using Research Electronic Data Capture (REDCap) software and validated using medical record review.
- Search terms for the appropriate reports included "HIT", "argat" and "bival".
- The research project has been approved by the University of Kentucky institutional review board (IRB).

Results

Recorded Resident On-call Interventions Related to DTI Use in HIT from June 2011 - June 2012



Reports by Medical Service



References

1. Cooper T, White CL, Taber D, Uber WE, Kokko H, Mazur J. Am J Health Syst Pharm. 2012 Nov 15;69(22):1993-8. doi: 10.2146/ajhp120121.

Results

Patient Demographics			
Variable	Bivalirudin	Argatroban	
Ave. Age	62	58	
Ave. Baseline aPTT	29	30	
Ave. Initial Starting Dose	0.2 mg/kg/hr	1.2 mcg/kg/min	
Ave. Therapeutic Dose	0.2 mg/kg/hr	1.4 mcg/kg/min	

On-call Report Statistics			
Description	Number (%)		
Total number of reports related to DTI use in HIT	81 (1.4)		
Total number of reports related to DTI use in HIT after-hours	33 (0.57)		
Average number of DTI interventions per report	4		
Number of unique patients	34		
Pass-off to residents	47		
Pass-off to preceptors/pharmacist	36		

Conclusions

- A 24-hour on-call pharmacy service can provide residents with valuable learning experiences in the management of HIT, specifically regarding DTI utilization, indications for DTI use, interpretation of relevant laboratory results, and optimization of DTI dosing.
- With available advice and guidance from preceptors and senior pharmacists, pharmacy residents are able to provide around-the-clock monitoring of DTIs in patients with confirmed or suspected HIT.

Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation:

Zachary Noel: Nothing to disclose; Aaron Cook, PharmD: Nothing to disclose; George Davis, PharmD, BCPS: Nothing to disclose