

Prevalence of pharmacy-led warfarin education in a community hospital: a retrospective review

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Background Data for Second Data for this Review (Pending Service Line Process Education **Improvement** and Expansion Increased patient education Hospital Consumer Assessment of Decreased readmission Healthcare Providers and Systems "Communication about medicines" Improved HCAHPS scores measure Increased patient interventions Student • Questions 16 & 17 Expansion of discharge Rx Rotations TE-5 Education² Improved experiential training Advanced Experientia Enhanced clinical pharmacy Compliance Rotations services extended to patients Dietary advice Estimated cost avoidance durin Follow-up monitoring one APPE cycle \$908,800 Potential for adverse drug reactions and **Activities** interactions **During APPE**

Purpose and Objectives

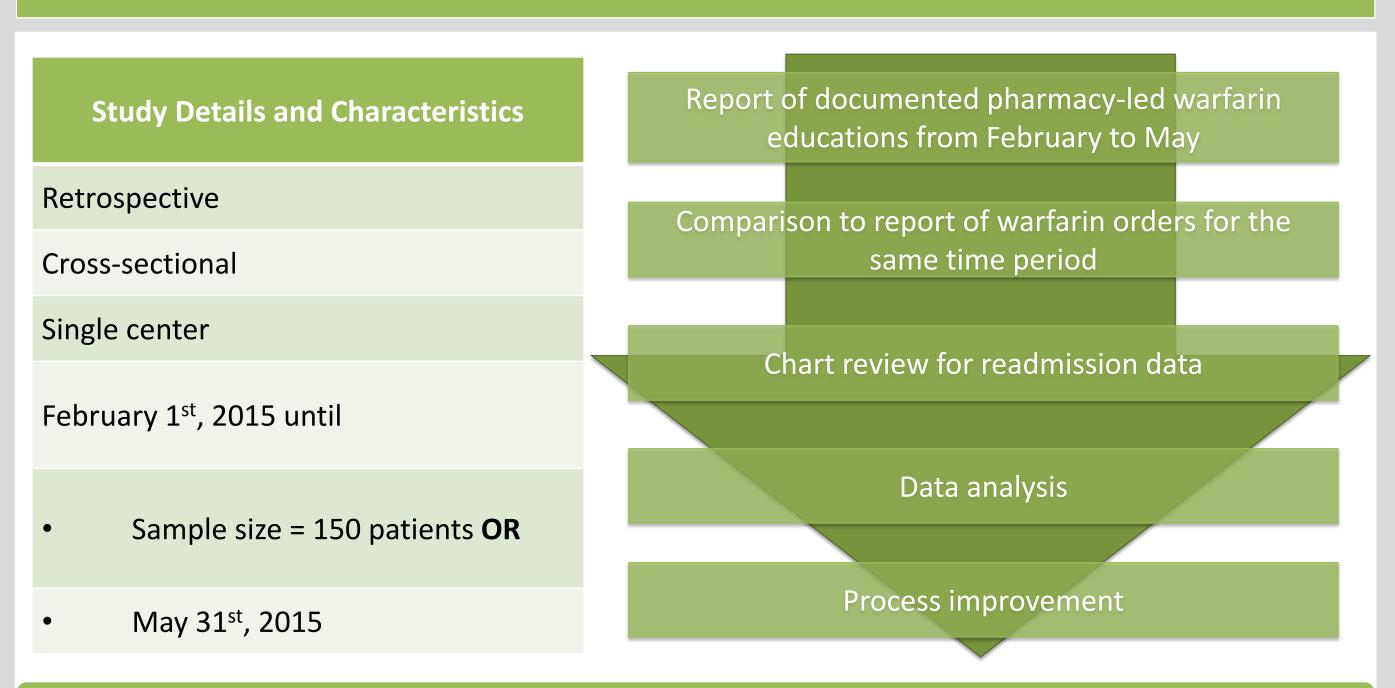
Purpose **Primary** Objective Secondar Objectives

To evaluate the pharmacy department's warfarin patient education clinical service at a community hospital. To determine the proportion of warfarin patients educated by

the pharmacy department.

- To determine which pharmacy personnel are currently performing pharmacy-led warfarin patient educations.
- To evaluate the difference in 30 and 60 day readmission rates for warfarin patients educated by the pharmacy department.
- To evaluate the cost associated with pharmacy-led warfarin educations based on pharmacist time.

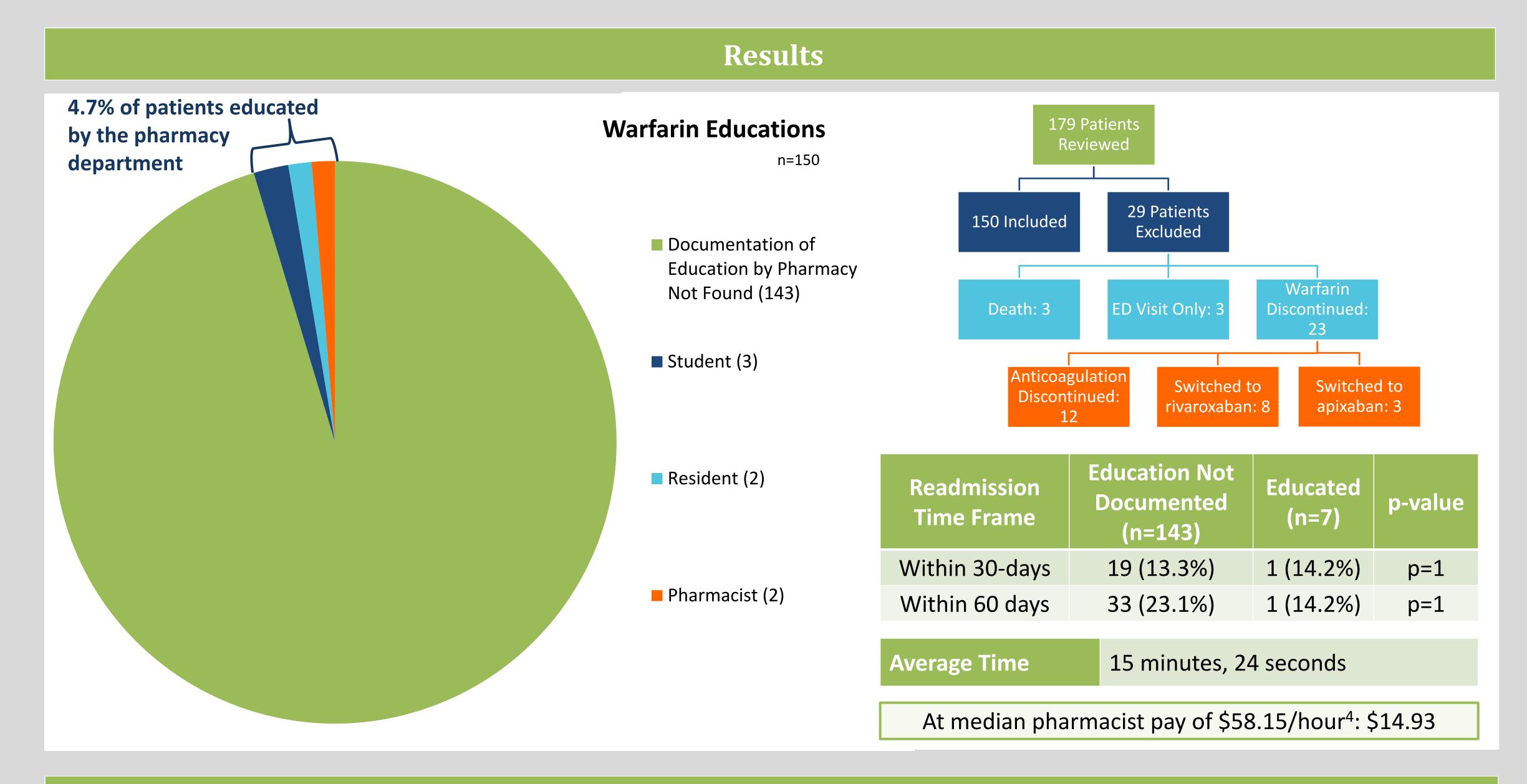
Methods



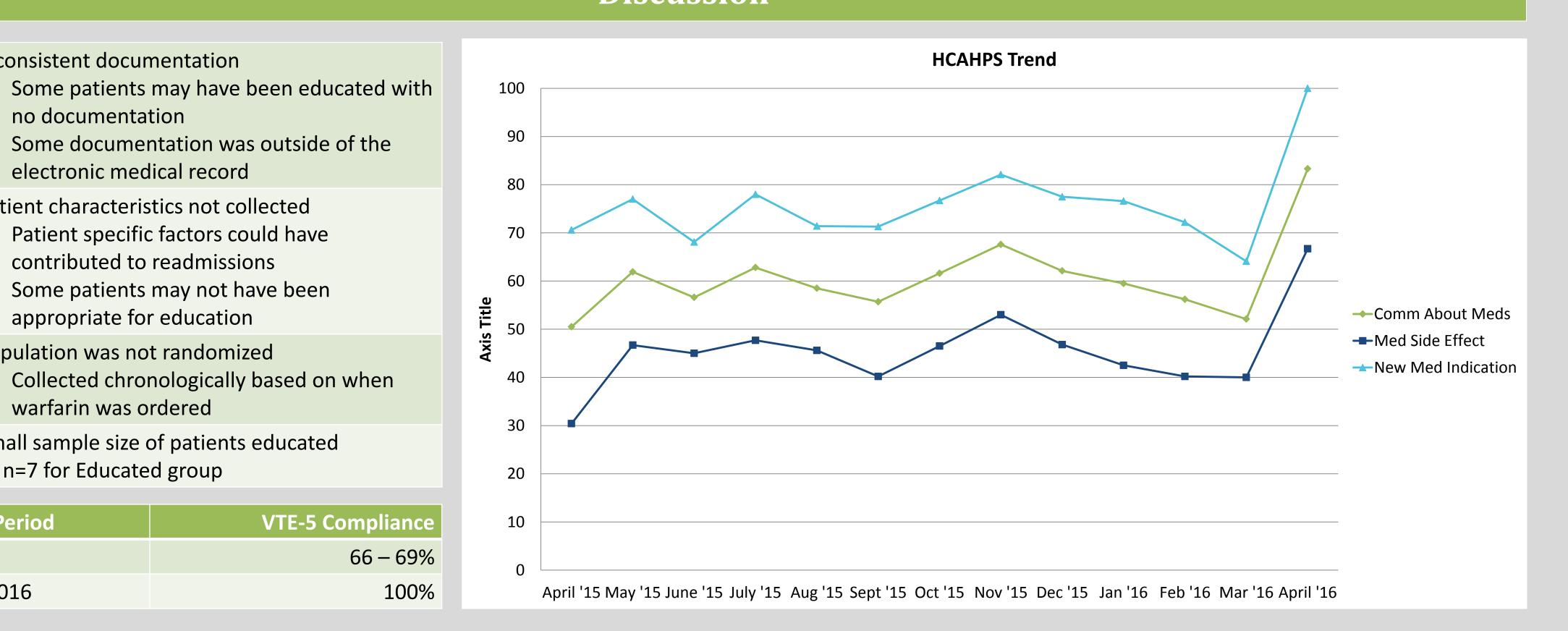
Age ≥ 18yrs

- Inpatient warfarin orders at CoxHealth South Hospital
- Discharged on warfarin

Failure to meet all inclusion criteria



Discussion



Process Improvement and Service Line Implementation

Nursing staff

Q4 2015 – Q1 2016

Q1-3 2015

Task ordered to provide education

Inconsistent documentation

no documentation

electronic medical record

Patient characteristics not collected

contributed to readmissions

appropriate for education

Population was not randomized

warfarin was ordered

n=7 for Educated group

Patient specific factors could have

Some patients may not have been

Small sample size of patients educated

Some documentation was outside of the

Collected chronologically based on when

Multi-page handout

Time Period

Documentation

- Handout printed and saved in electronic medical record
- No required documentation of interaction

Barriers

- Competing responsibilities
- Variations in verbal instruction

Standardized Computerized training module Documentation Patient Counseling Competency mproved Educational andouts Report of patients with warfarin orders Patients evaluated for appropriateness Alignment with Nursing of educational session Education Process Service Line • VTE-5 compliant education handout mplementation • Standardized documentation in the electronic medical record Evaluation of Service Line

Conclusion

- Previously, the pharmacy department lacked consistent documentation of patient warfarin educations, leading to a low number of documented educations completed by the department.
- Our sample size of patients with education documented was too small to determine if warfarin education by the pharmacy department had an affect on readmission rates at 30 and 60 days.
- The approximate cost of a warfarin patient education provided by a pharmacist is \$14.93 based on an average 15 minute and 24 second education time. Utilizing a layered-learning model with student and resident pharmacists providing the educations could decrease costs and allow for pharmacists time to be spent on other clinical services.

Future Directions

Second Retrospective Review

Positions

- Evaluate new process
- Evaluate patient outcomes

Cost benefit analysis **Proposal for Intern Pharmacist**

Maintain service line year-round

Provide weekend and evening coverage

Expansion of Patient Education Services

- Full anticoagulation teaching service
- Teaching services for other medications
- Diseases state based teaching services

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