

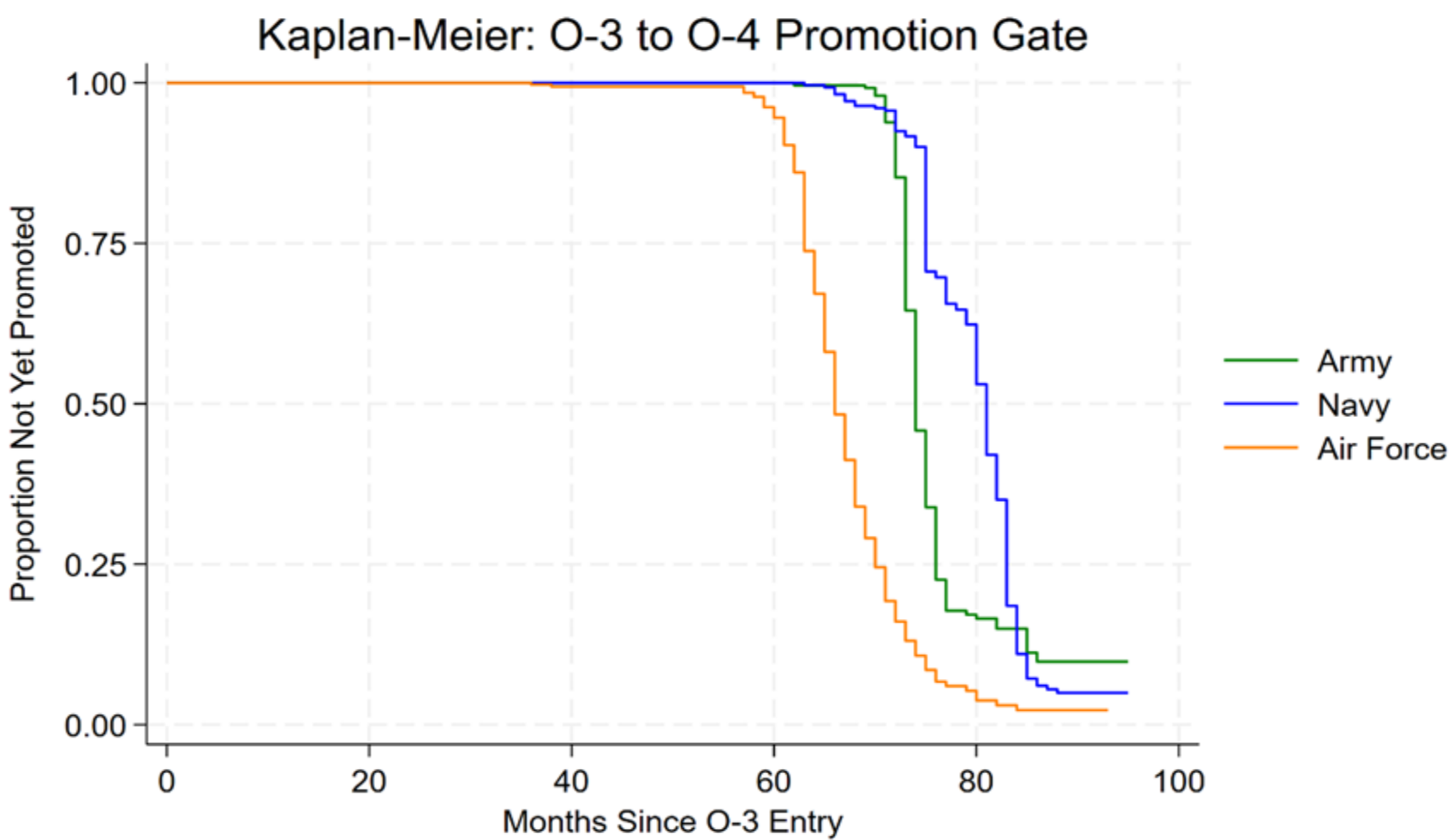
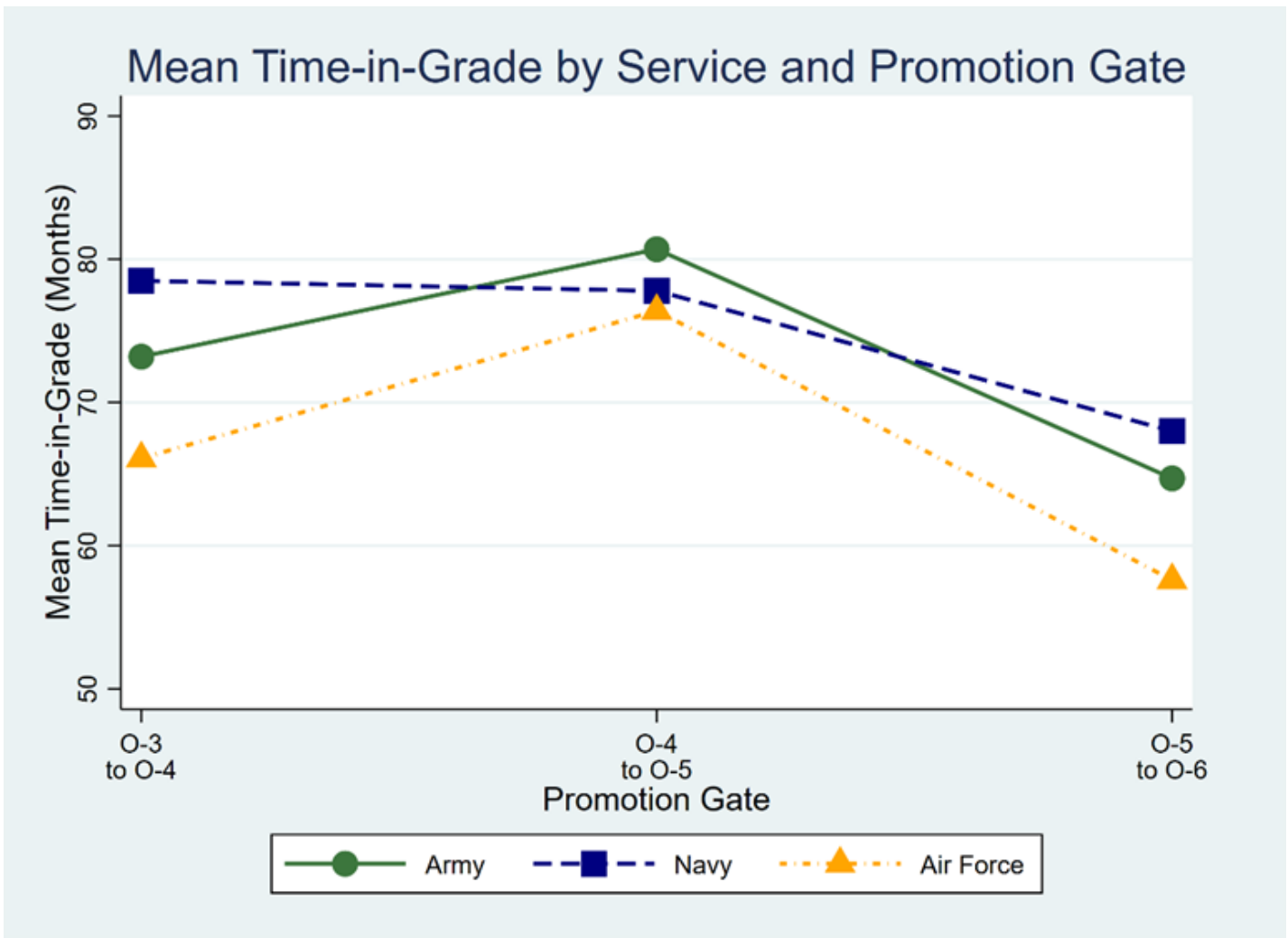
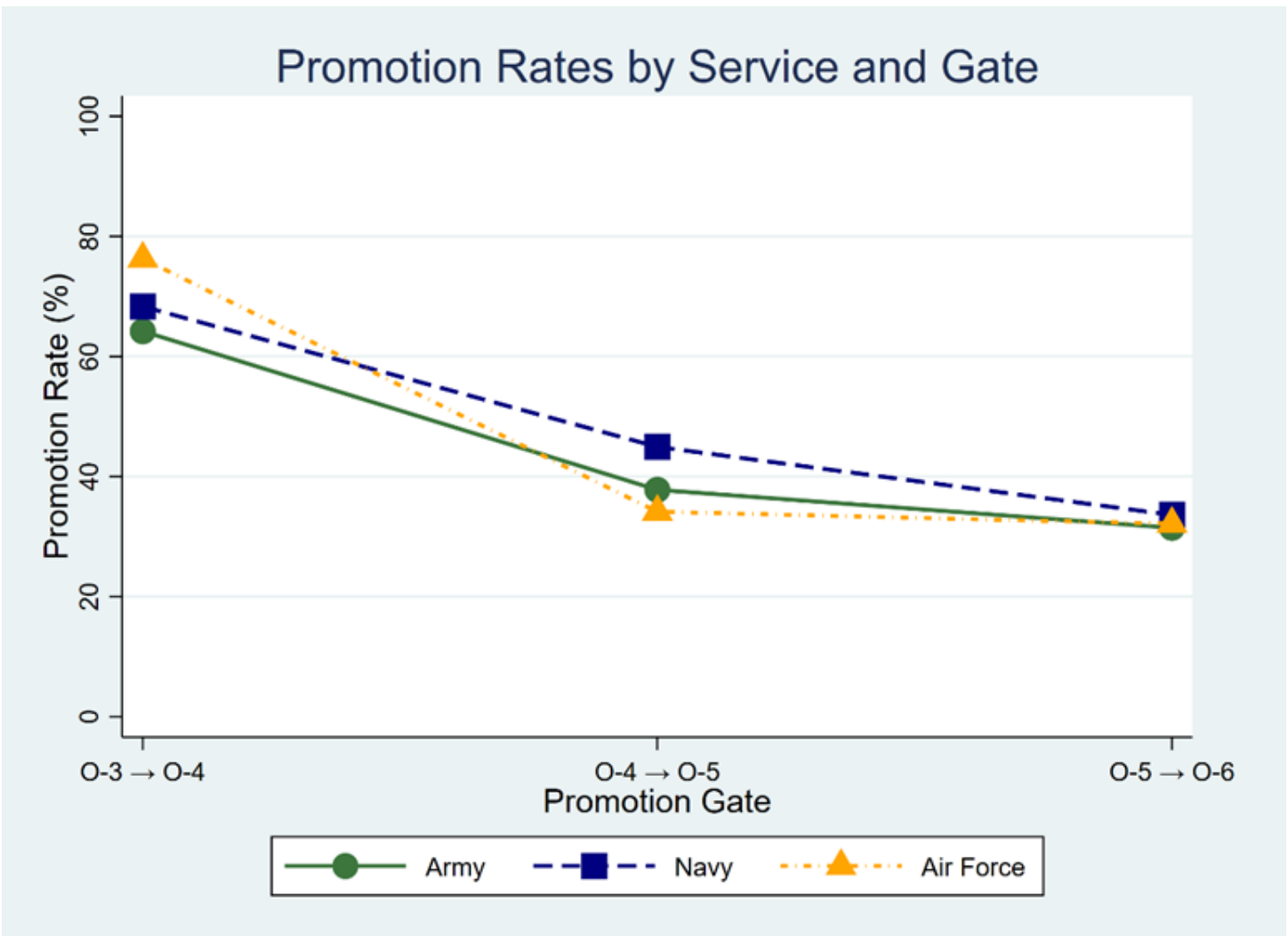
# Stripes and Stethoscopes: A Comparative Analysis of Nurse Corps Promotion Rates Across Army, Navy, and Air Force

## Abstract

Military nurses in the Army, Navy, and Air Force perform nearly identical roles, often side-by-side in joint facilities, yet each service manages its own promotion timelines. This study provides the first cross-service comparison of Nurse Corps promotion outcomes using data from 2016–2024 for nearly 3,000 active-duty nurses. The research identified a service-reversal pattern: the Air Force promotes faster and at higher rates to Major (O-4), while the Navy leads at the senior ranks. Advanced-practice nurses promote consistently across all branches, but generalist nurses are more vulnerable to service-specific policy differences. As military medicine integrates into joint environments, understanding these patterns is critical for addressing potential career inequities that affect morale and retention.

## Methods

- Descriptive stats**  
Promotion rates by service, gate, subspecialty, and entry cohort
- Logistic Regression**  
Service-specific models with Medical-Surgical as reference
- Career Track Grouping**  
Advanced Practice, Critical Care/Specialized, and Clinical/Generalists
- Survival Analysis**  
Promotion timing curves with log-rank tests
- Proportional Hazards**  
Hazard ratios controlling for entry cohort, gender, race, and marital status



## Results & Impact

- Reversal Pattern:** Air Force leads at O-4 (76.3%); Navy leads at O-5 (44.9%); all three converge at O-6 (2.2 pp spread). Pattern persists within subspecialties.
- Timing Advantage:** Air Force promotes 12.4 months faster to O-4 than Navy (Cox HR = 3.88,  $p < .01$ ).  
Subspecialty: Med-Surg nurses had lowest rates in every service.
- Demographics:** Female (HR=1.30,  $p < .01$ ) and Married (HR=1.33,  $p < .01$ ) nurses promoted faster at O-4. Asian nurses faced slower timing (HR=0.75,  $p < .05$ ).

## Future Research

- Include individual-level variables: education, duty assignments, deployment history, and others
- Extend observation window beyond FY 2024 for complete O-5/O-6 outcomes and additional entry cohorts
- Link promotion outcomes to retention decisions to test whether disparities drive differential attrition