

Antimicrobial Stewardship Program (ASP) Advancement in Rhode Island (RI) Since Implementation of a Statewide Antimicrobial Stewardship Task Force (RIASTF)

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ABSTRACT

Background: RI is one of only a few states with a statewide pharmacy ASP task force (RIASTF). Through collaboration between all acute care institutions in the state, its mission is to lead national efforts in reducing antimicrobial-resistant hospital-associated infections.

Methods: Two 25-question self assessment surveys were developed in order to describe changes in ASP prevalence/characteristics in all acute care hospitals which may have been augmented by RIASTF's establishment in May 2011. A "Pre-Survey" assessed each hospital's ASP involvement as of May 2011 and a "Post-Survey" assessed this as of February 2013. Hospital representatives who attended the RIASTF meetings completed the surveys on paper; for those not present, the survey was conducted by an investigator via telephone who then entered all answers into web-based versions of the survey.

Results: Representatives from 100% (11/11) of RI's acute care hospitals responded to the surveys: 45.5% represented community hospitals and 54.5% represented teaching hospitals. Hospitals that reported having a full ASP program increased from 18.2% in 2011 to 54.5% in 2013; those without ASP plans decreased from 36.4% to 9.1%. The same top 2 barriers to ASPs were identified in 2011 and 2013 (lack of financial resources and lack of infectious disease personnel); however, their incidence decreased from 63.6% to 45.5% and 54.5% to 36.4%, respectively. Of hospitals that reported "not a priority" (27.2%) and "not consistent with institutional philosophy" (18.2%) as barriers in 2011, 0% reported these obstacles in 2013; those reporting "no barriers" increased from 0% to 36.4% from 2011 to 2013. Hospitals with no full time equivalents (FTEs) allotted to ASP pharmacists or physicians in 2011 decreased from 72.7% to 36.4% and 90.9% to 54.5%, respectively in 2013; those allotting ≥0.5 FTEs increased from 18.2% to 45.5% and 0% to 27.3%, respectively.

Conclusions: Many studies describe the success of single hospital ASPs, but assessment of stewardship strategies across a larger statewide scale is limited. Since the implementation of a statewide collaborative, there has been significant ASP advancement in RI; RIASTF may have played a role in this progress, thus supporting the adoption of similar programs in other states.

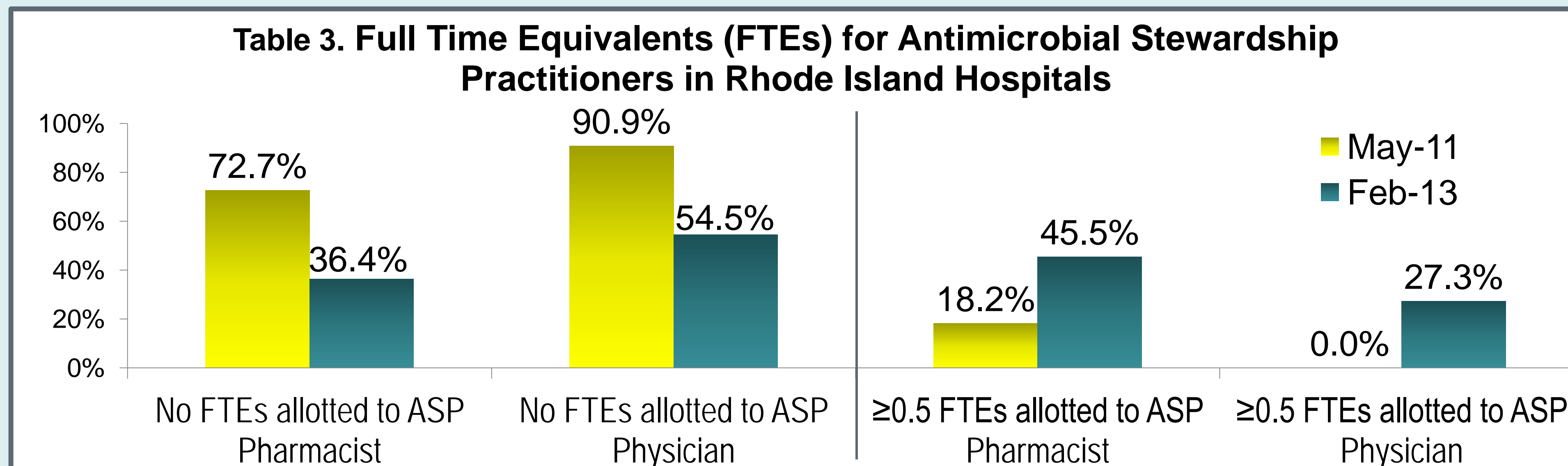
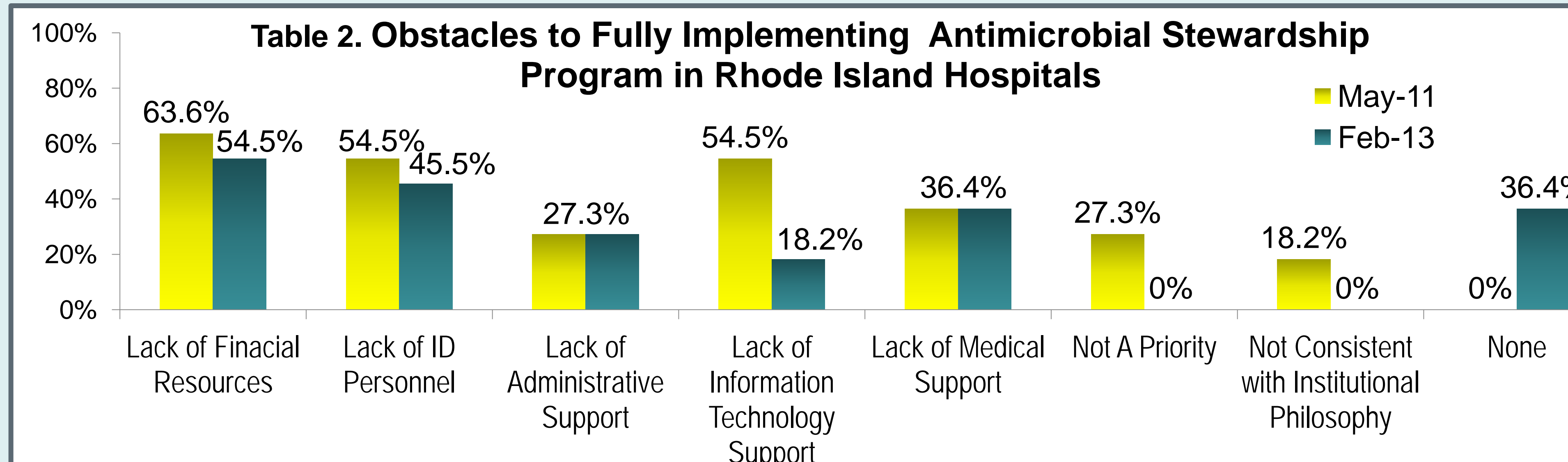
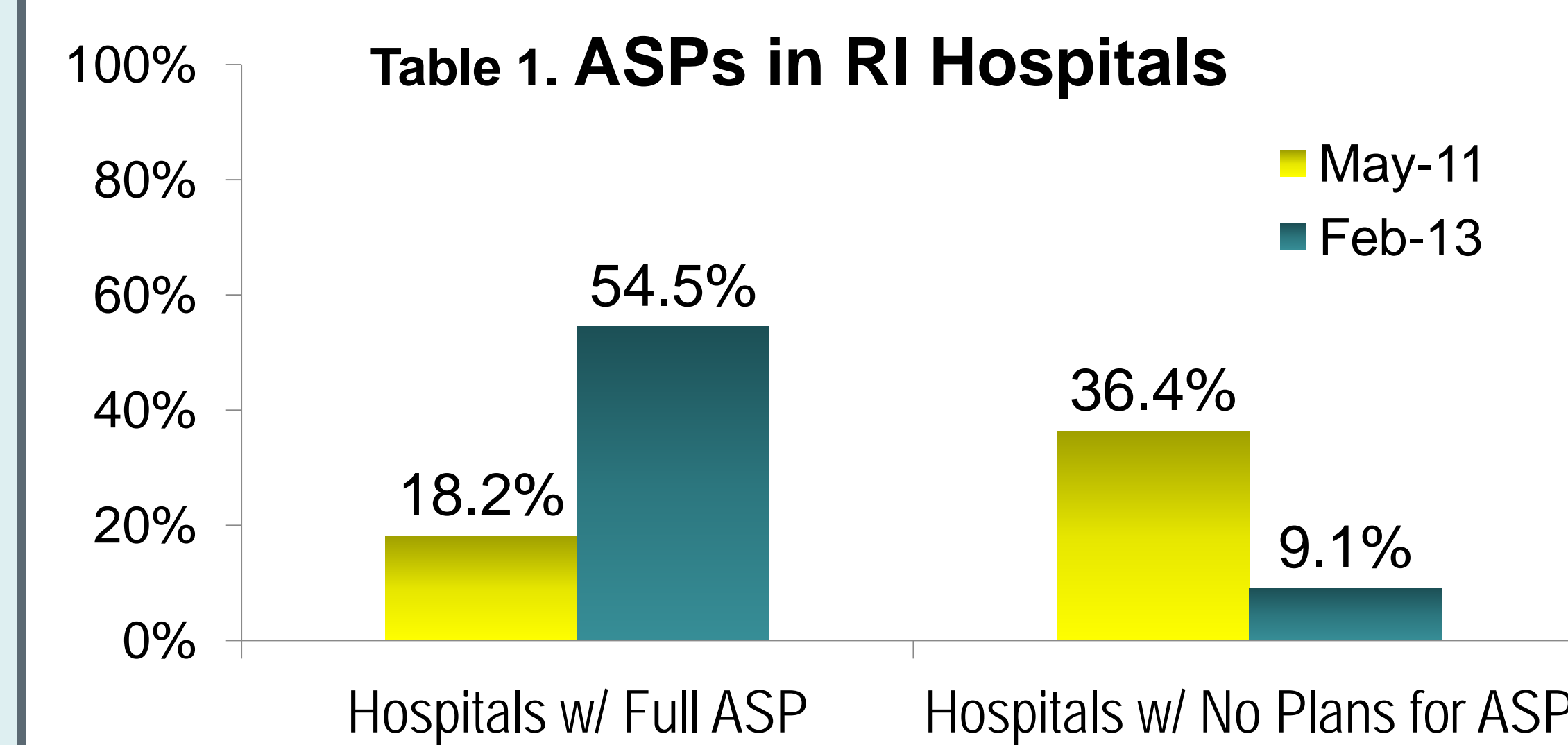
METHODS

- Two 25-question self-assessment surveys were developed by three RIASTF members to assess each hospital's involvement in stewardship based on skills and activities recommended in the 2007 IDSA/SHEA guidelines for ASP's¹
 - "Pre-survey" assessed ASP involvement as of May 2011
 - "Post-survey" assessed ASP involvement as of February 2013
- The "Pre-survey" was administered during an RIASTF meeting so respondents could be reminded to answer questions as of May 2011 and the "Post-survey" was administered during the subsequent monthly meeting
 - For both surveys, hospital representatives who attended the RIASTF meetings completed the surveys on paper
 - For members that were not present, the same survey was conducted by an investigator via telephone
 - An investigator entered all answers into web-based versions of the survey (SurveyMonkey®) for analysis

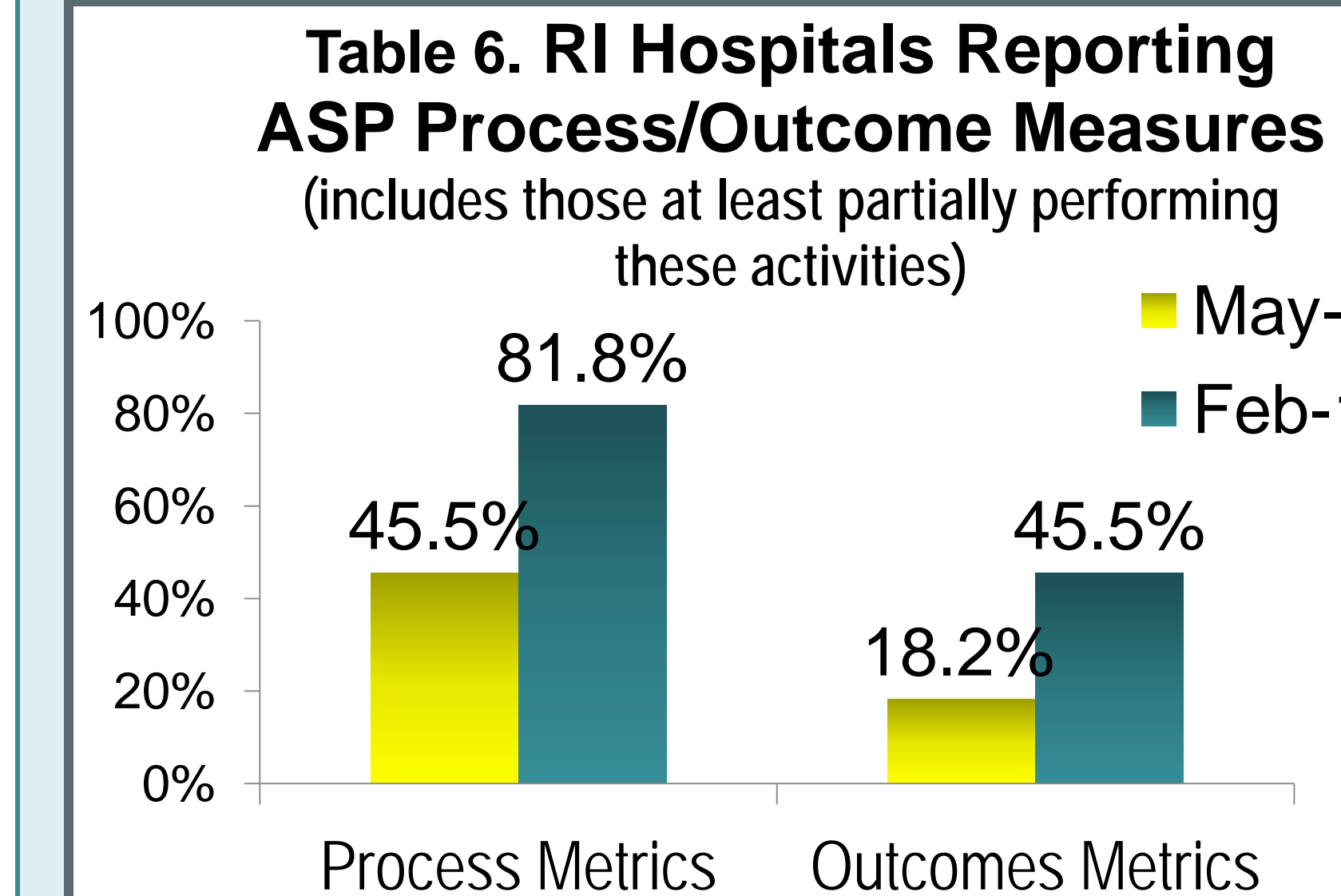
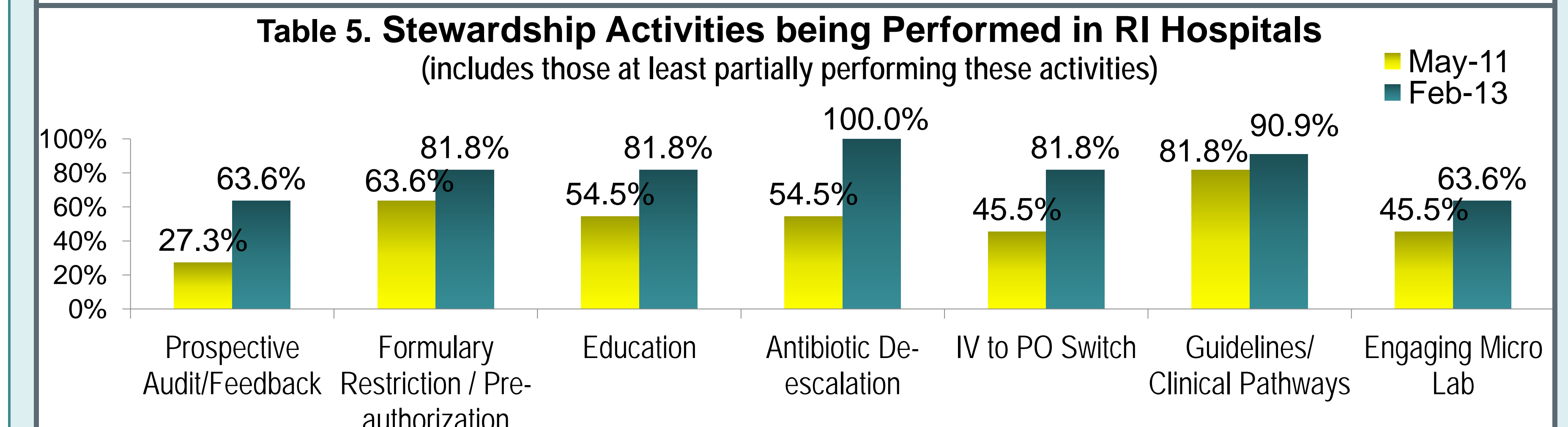
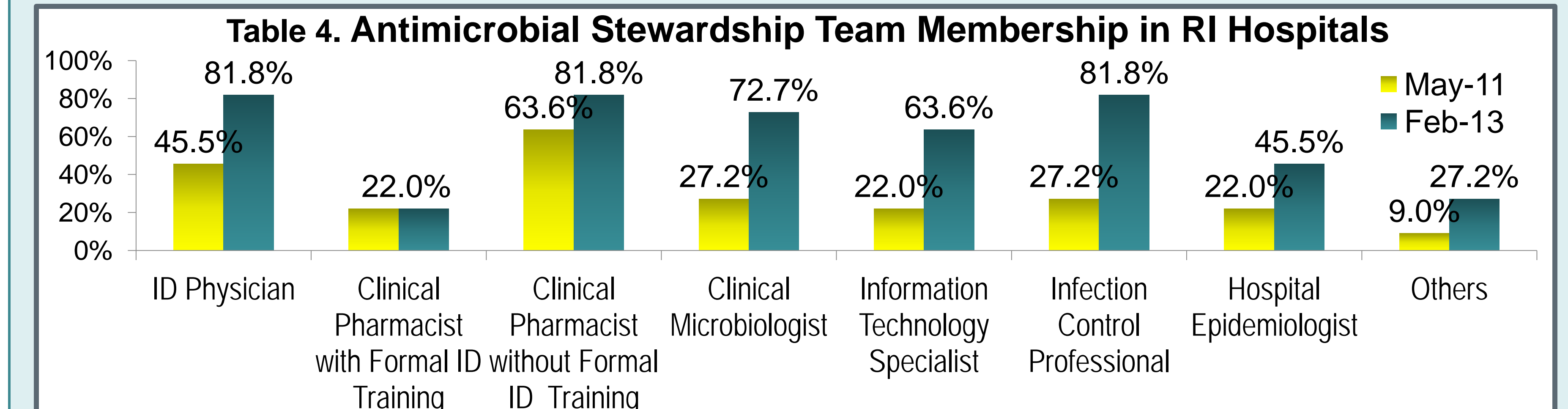
¹Dellit et al. Clin Infect Dis. 2007;44:159-77

RESULTS

- Representatives from 100% (11/11) acute care hospitals responded to the surveys
 - Rhode Island Hospital and Miriam Hospital replied together as a single entity
 - Hospitals are comprised of 45.5% community and 54.5% teaching hospitals
- The number of hospitals that were in planning, had some components of AS or had a full ASP increased from **63.7% in May 2011 to 90.8% in February 2013**



RESULTS (CONTINUED)



- Pharmacists were also surveyed on their feelings towards their own stewardship knowledge base (ie. ability to practice stewardship)
 - May 2011 and Feb 2013: 36.4% reported being fully or moderately competent in antibiotic stewardship
 - May 2011: 9.1% reported no previous training → in Feb 2013 this group changed to "minimal competence"
- Members with no previous training were able to gain a knowledge base to become at least minimally competent in the foundations of ASPs

BACKGROUND

- The Rhode Island Antimicrobial Stewardship Task Force (RIASTF) formed in May 2011 and consists of a statewide group of pharmacist representatives from each of the 12 acute care hospitals in RI
- RIASTF Mission: to lead national efforts in reducing antimicrobial-resistant hospital-associated infections through collaboration among all acute care institutions and improve the quality of patient care through antimicrobial stewardship
- RIASTF members meet monthly and work together to advance and improve the quality of antimicrobial stewardship in the state through development of tools, sharing of ideas and individual hospital project results, list-serves and other networking opportunities
- A goal of RIASTF is to develop stewardship practitioners in hospitals without an infectious diseases (ID) pharmacist by offering educational lectures and review sessions. All members participate and help develop educational presentations
 - Examples of past activities: discussions on topics like stewardship measures and metrics, bacterial resistance mechanisms and various ID treatment guidelines, ID journal clubs, and summary presentations of findings from major national ID meetings
- The purpose of this survey is to determine if the existence of RIASTF could have contributed to ASP advancements in RI's acute care hospitals.

CONCLUSIONS

- Since the implementation of a statewide pharmacist collaborative (RIASTF), there has been significant ASP advancement in the state of Rhode Island
 - In addition to recent increased ASP awareness through other avenues (eg. CDC campaigns, Quality Improvement Organizations. etc), RIASTF may have played a role in this progress in RI
- Many studies describe the success of single hospital ASPs; however the assessment of stewardship strategies across a larger statewide scale is limited → RIASTF 's success may support the adoption of similar programs in other states
- Next steps: RIASTF will work on collecting data from participating hospitals (eg. antimicrobial usage and antibiogram data) in hopes of producing statewide stewardship outcomes

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