

**BOSTON
UNIVERSITY**

School of Medicine
Continuing Medical Education



DOSE HPV: Development of Systems and Education for HPV Vaccination

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HPV VACs

Vaccinate Adolescents against Cancers

Conflicts of Interest

- Dr. Perkins has no conflicts of interest to report

Vaccination Program: DOSE HPV



Research-Tested Intervention Programs (RTIPs)

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- Evidence-based program to increase HPV vaccination rates at FQHCs
- Core principles: repeated contacts, education, QI support
- Incentives: MOC and CME credits for providers

Intervention structure

Intervention Step

Pre-intervention: 6 month period prior to the first contact with the practices

Session 1 | Feedback of Initial Baseline Data

Session 2 | Education on HPV-related cancers, vaccine efficacy/safety

Session 3 | Motivational interviewing

Session 4 | Creation of individualized action plans

Session 5-8 | Feedback on follow-up data and action plan review

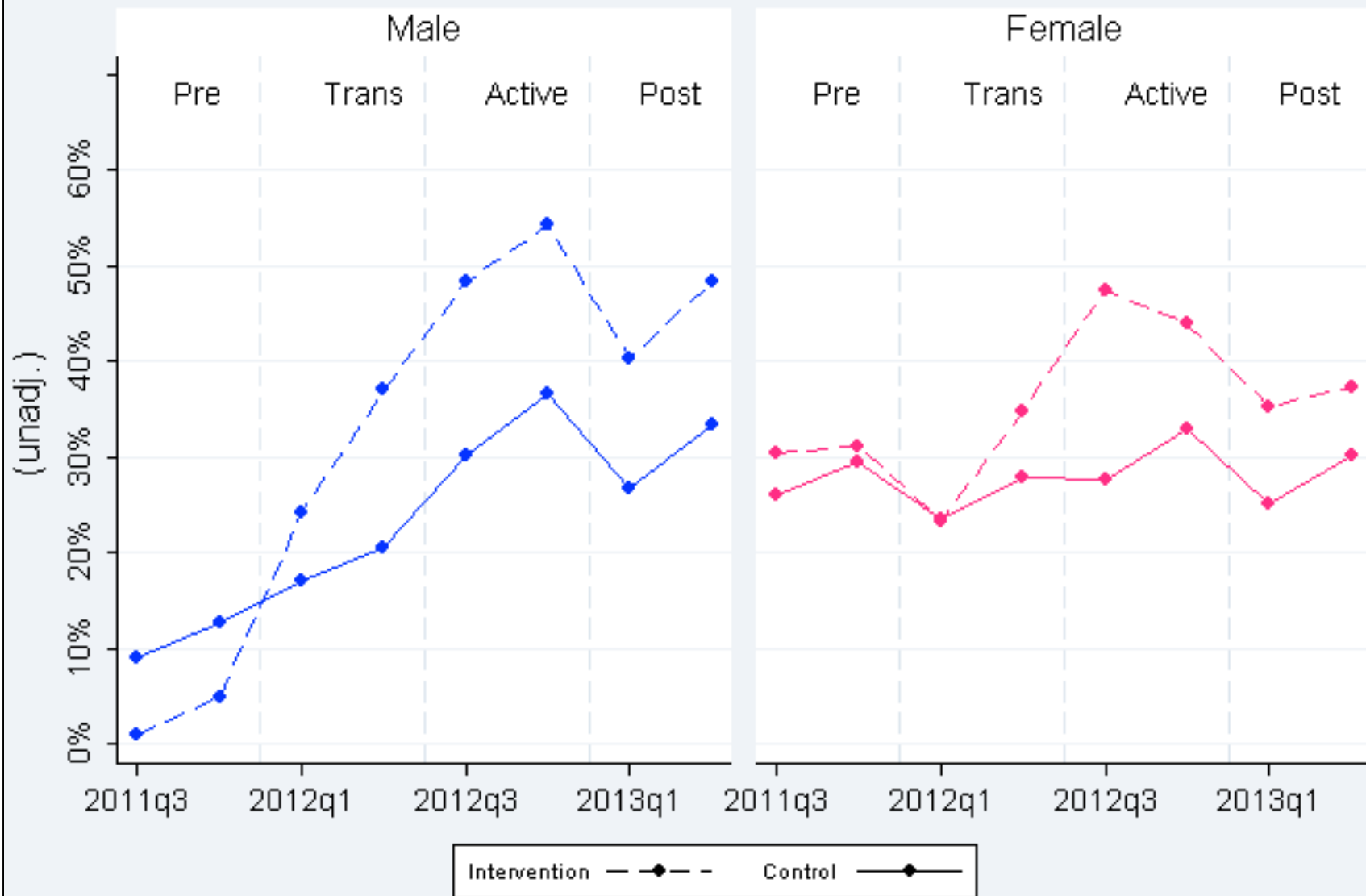
Post-intervention: 6 month period following the final feedback session and assignment of credits to participating providers

Pilot Study: Data Analysis

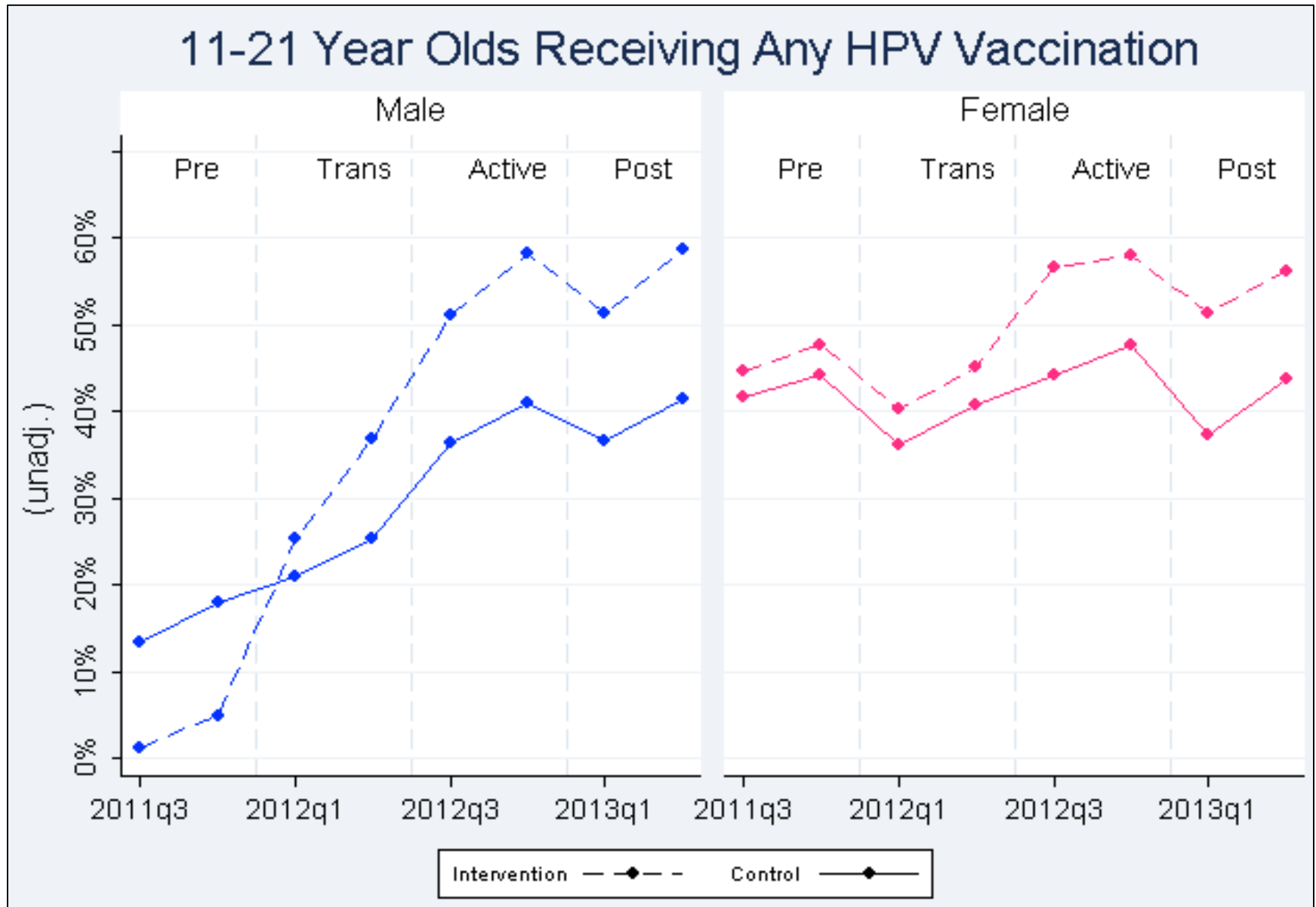
- Comparison of intervention (n=4093 patients) and control (n=9025 patients)
 - HPV initiation and completion of the next needed dose
 - Multivariable logistic regression accounting for clustering by practice

Analysis of intervention effect

11-21 Year Olds Initiating HPV Vaccination



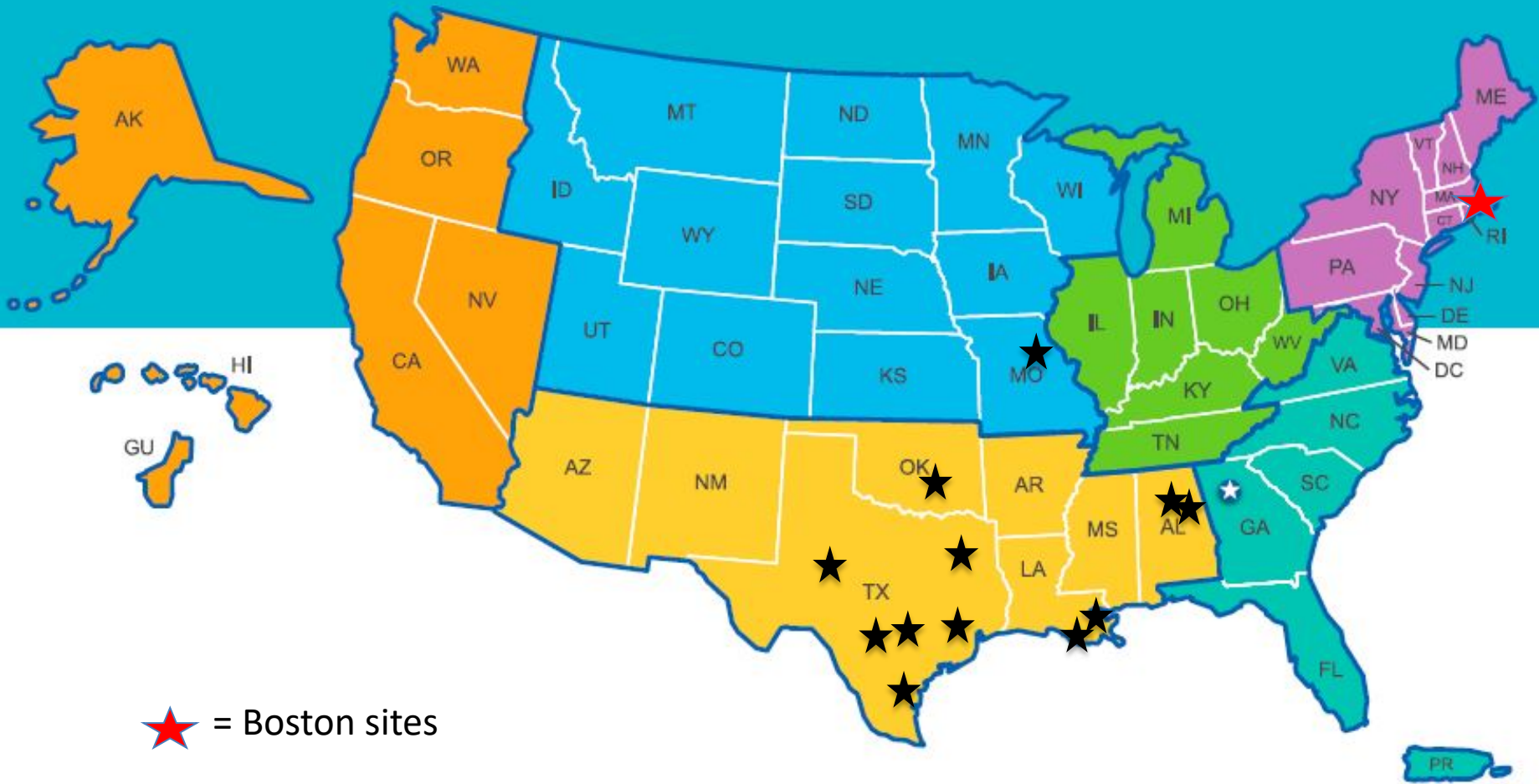
Analysis of intervention effect



Step 2: Dissemination

- Locally in Boston
 - 4 FQHC partners + safety net hospital
 - Pilot model without modifications
- Regionally with American Cancer Society
 - **12 FQHCs Systems** began Fall 2016-Dec. 2017
45 clinic intervention sites
 - Program facilitated by ACS staff with monthly phone support from ACS managers and Boston staff

DOSE-HPV Sites



★ = Boston sites

★ = ACS sites

Core Goals of DOSE-HPV intervention

- Increase **vaccine initiation and completion rates** in pilot sites
- Increase **FQHC capacity** through onsite Quality Improvement coaching
- Increasing **provider engagement** through Maintenance of Certification/CME credits



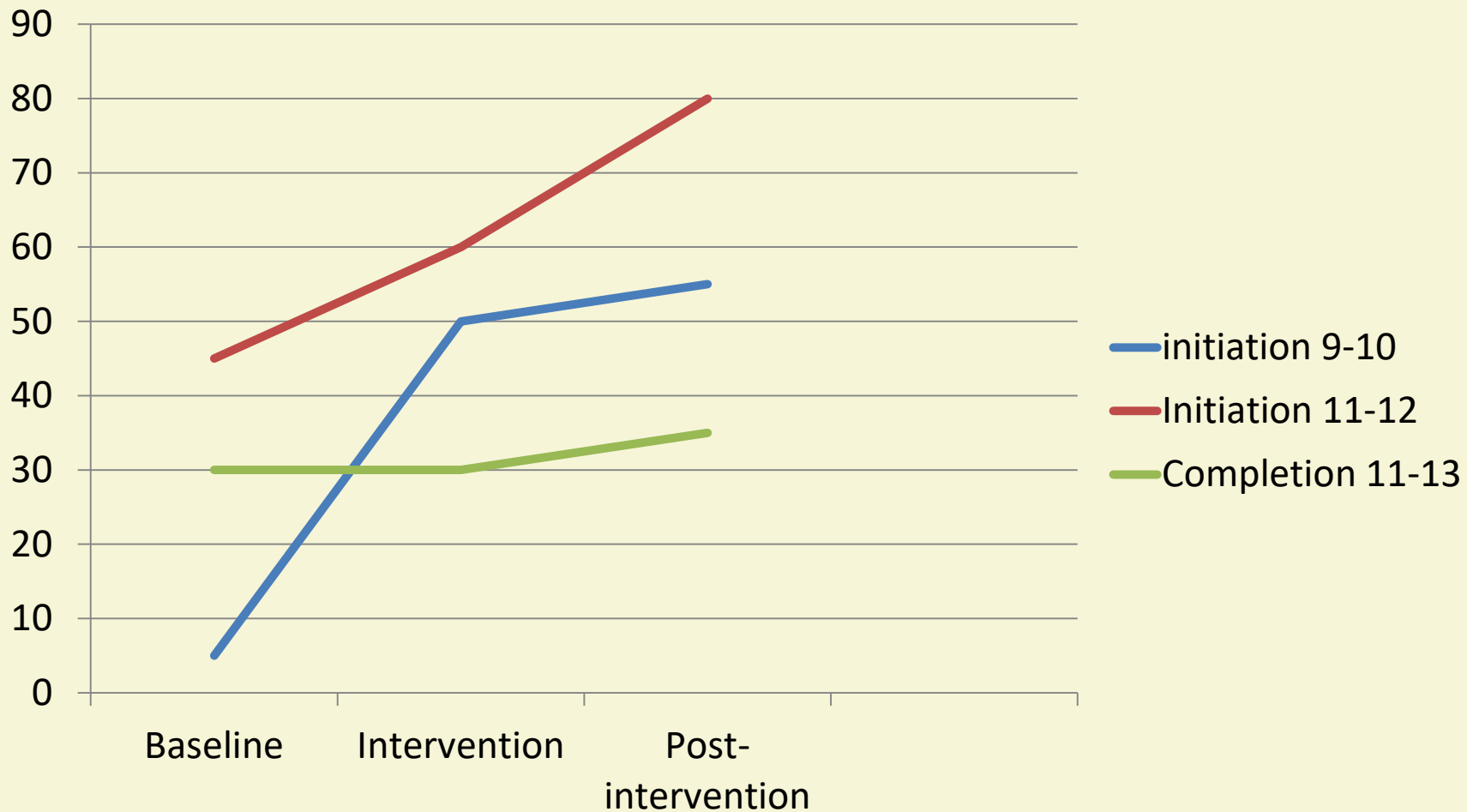
Mission:
HPV **CANCER**
FREE

RESULTS

Boston sites

- >80% initiation by high school age
- Lower completion rates
 - Sites chose to start vaccinating at 9-10 to facilitate completion
 - Intervention occurred during switch from 6 month 3 dose schedule to 12 month 2 dose schedule

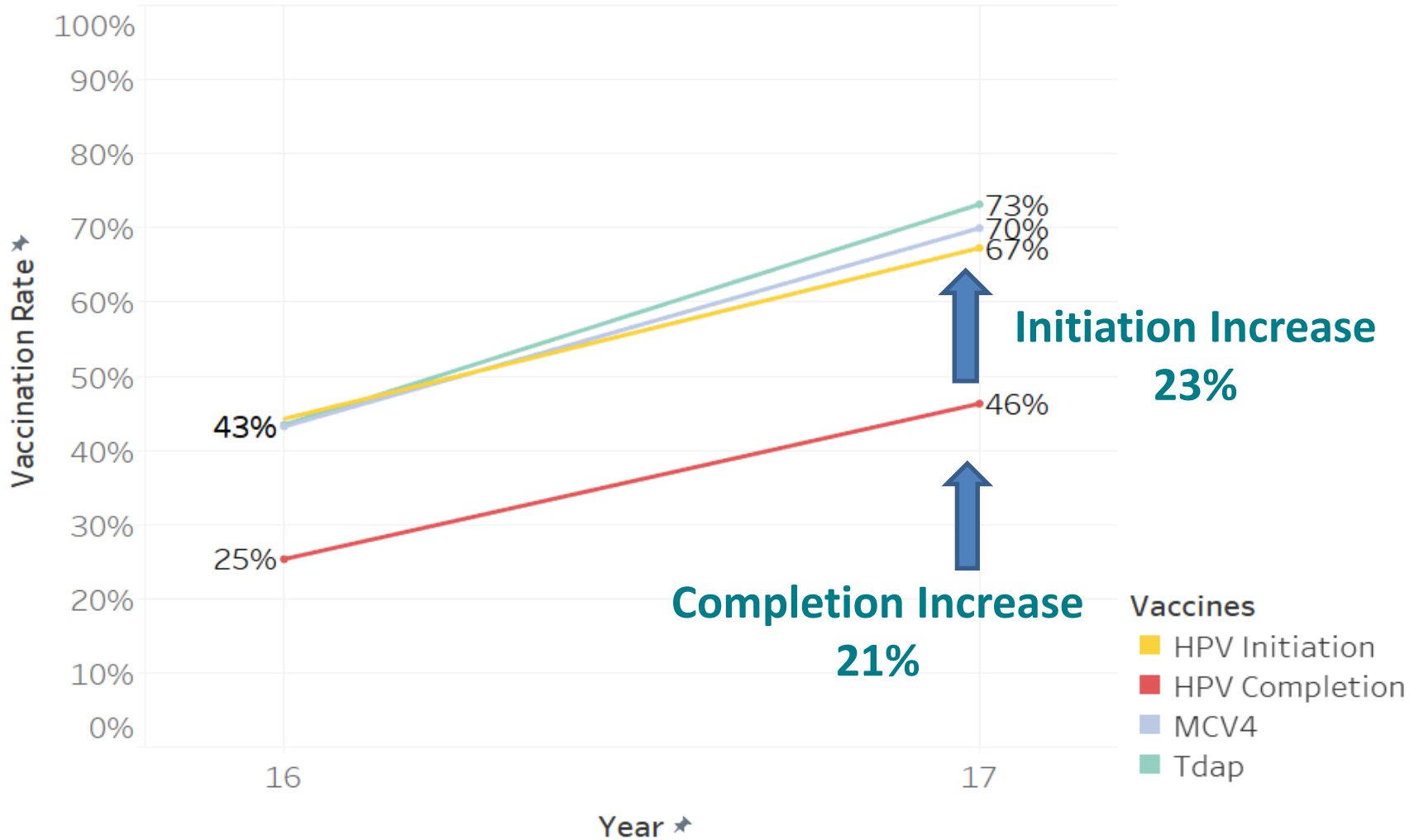
Preliminary Boston Results



ACS sites

- Low baseline initiation and completion rates
- Chose various evidence-based strategies
 - Standing orders
 - Reminder / recall
 - Patient education

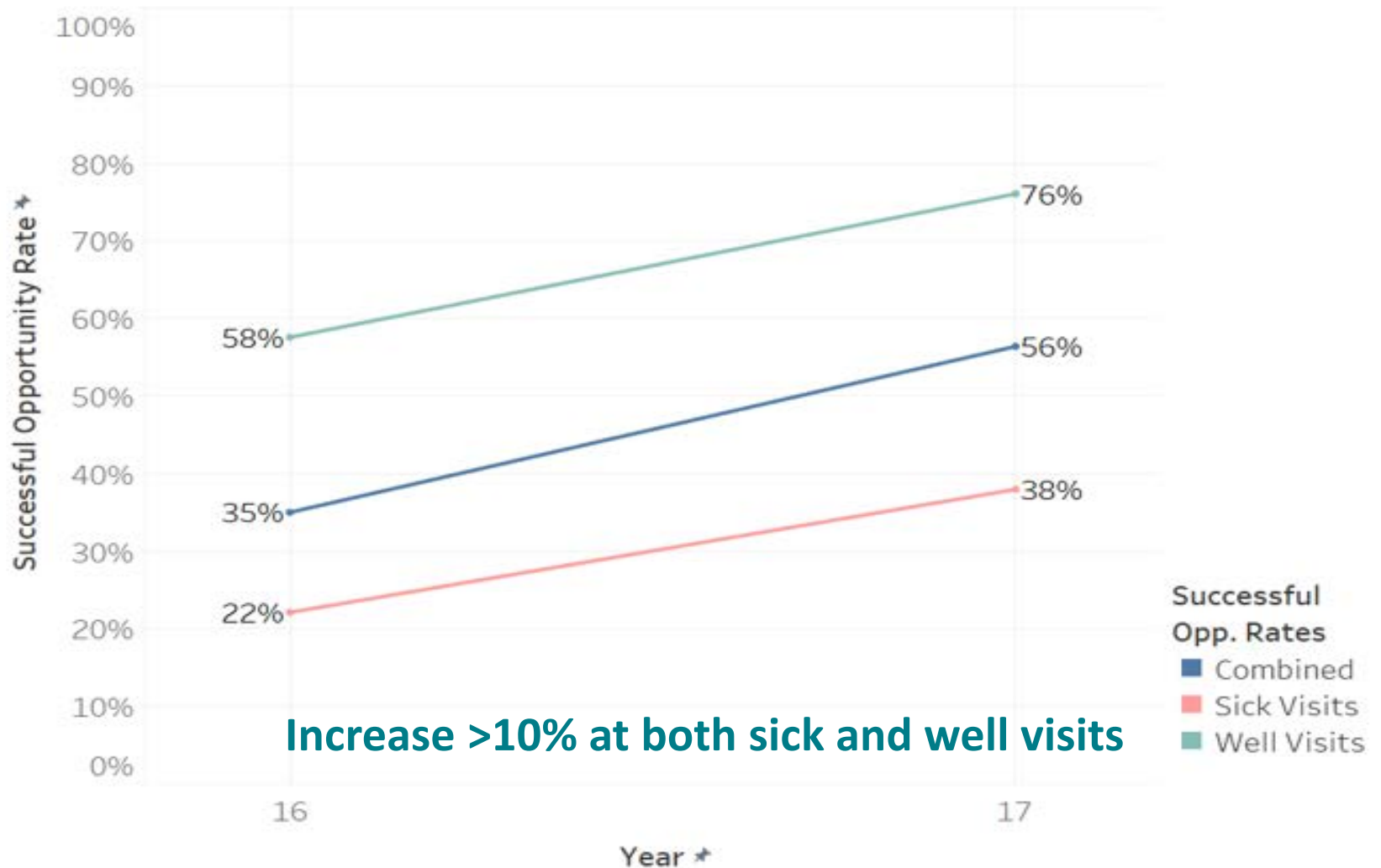
Average Adolescent Vaccination Rates at MOC Pilot Systems, 2016 to 2017



HPV Initiation, Tdap, and MCV4 among all 12 MOC Pilot systems, implementing the intervention in 45 clinic sites.

HPV Completion among 10 MOC Pilot systems with complete data.

Successful HPV Vaccination Opportunity Rate at MOC Pilot Systems, 2016 to 2017



Among 7 MOC Pilot systems with complete successful opportunity data

Conclusions

- **Successes**
 - DOSE-HPV disseminated in two different FQHC networks with increases in vaccination rates
- **Challenges**
 - High-touch program, significant staff time
 - Increasing completion still a challenge

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