

Adolescent AFIX Study: A PHSSR Approach to Improving the Delivery of HPV Vaccine

Research Team

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UNC
LINEBERGER

Overview

- Background
 - HPV vaccination in the U.S.
 - CDC's AFIX model
- Adolescent AFIX Study
 - Formative research
 - Material development
 - RCT progress to date
- PHSSR facilitators & challenges

HPV Vaccination in the U.S.

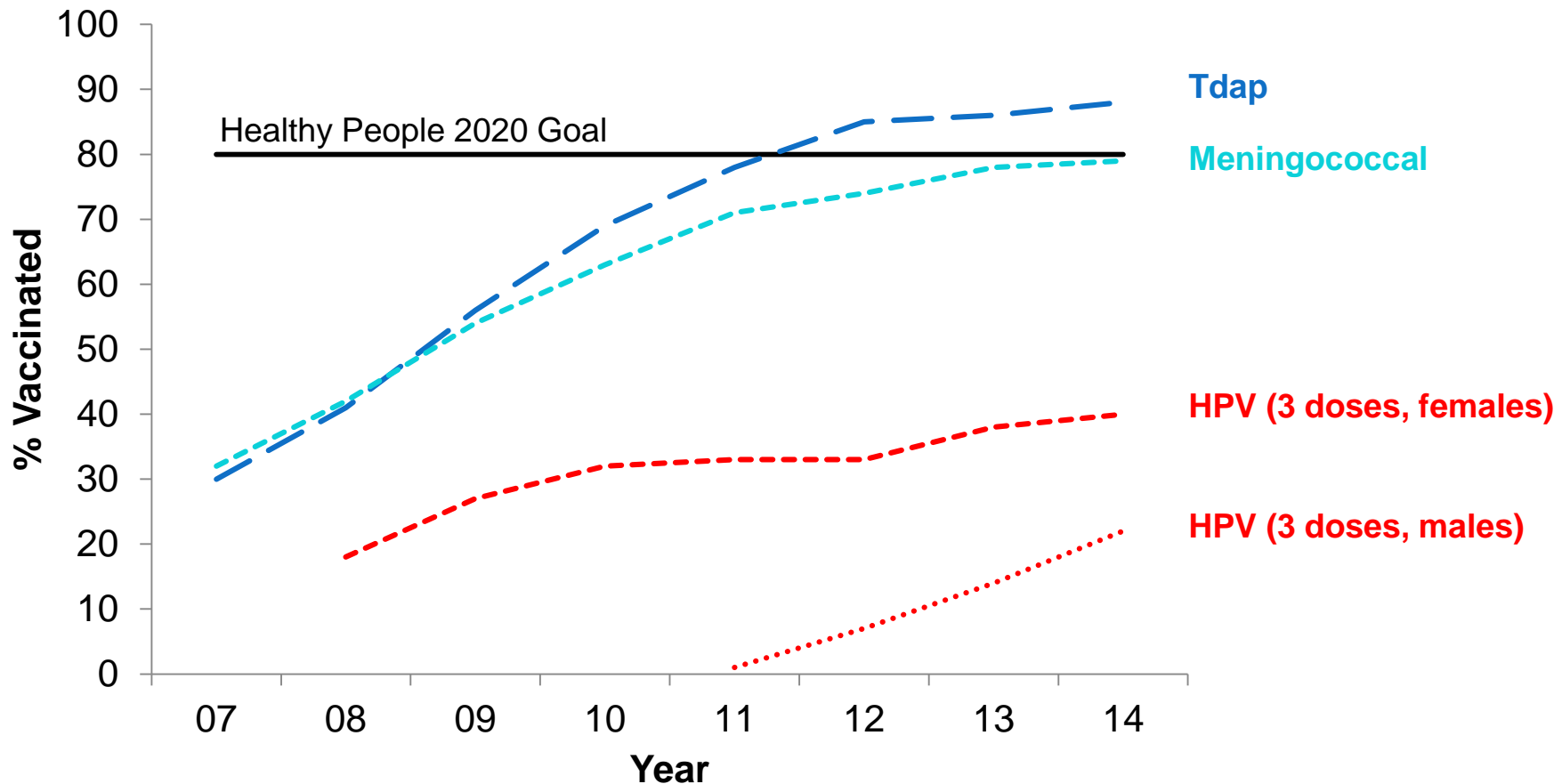
“Increasing HPV uptake must be a national priority.”

--President's Cancer Panel

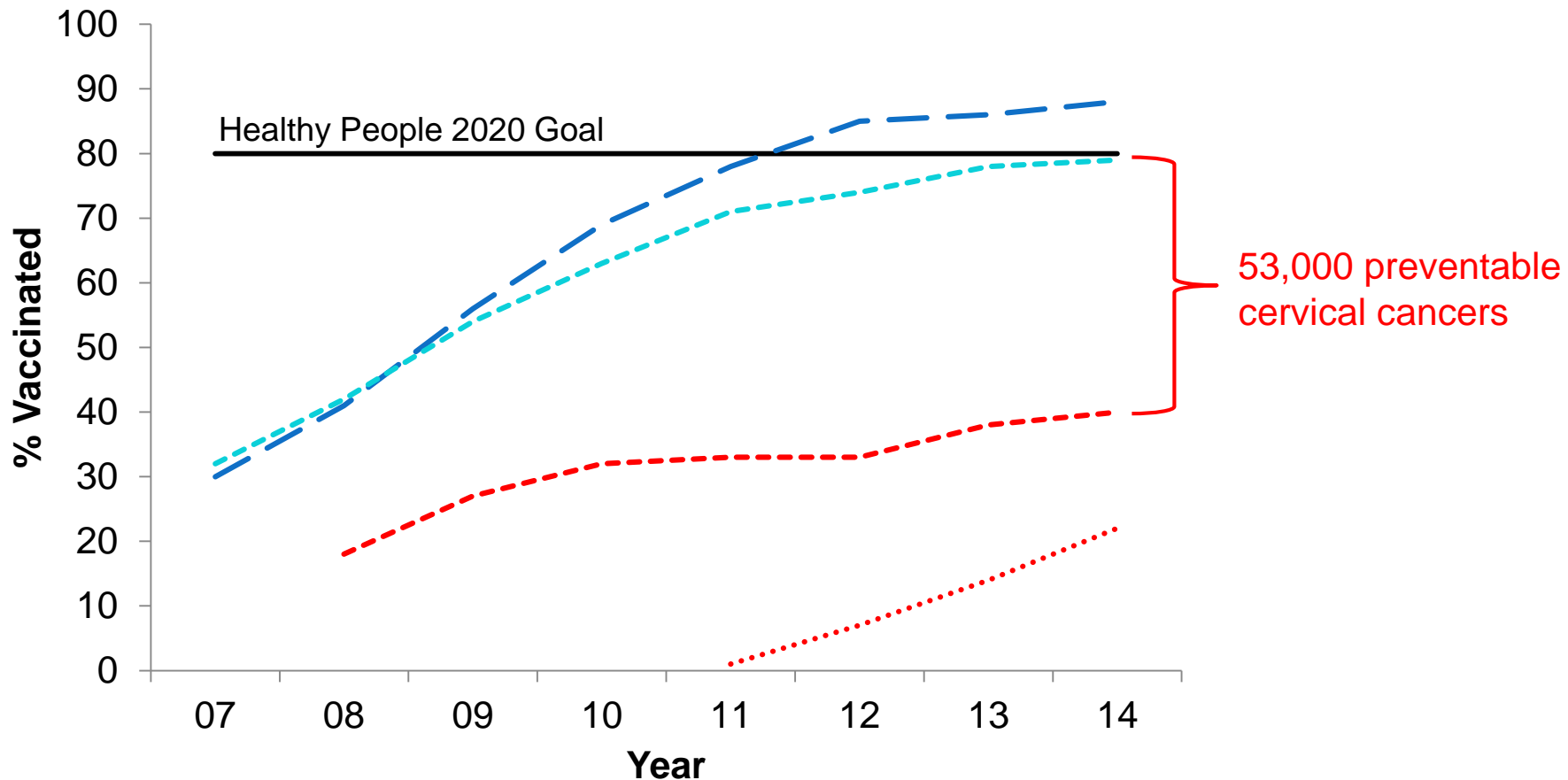
HPV vaccination guidelines

- Routine administration
 - Males and females, ages 11-12
- Catch up
 - Females and MSM to age 26
 - Other males to age 21
- Concomitant vaccination
 - Tetanus, diphtheria, pertussis (Tdap)
 - Meningococcal vaccine

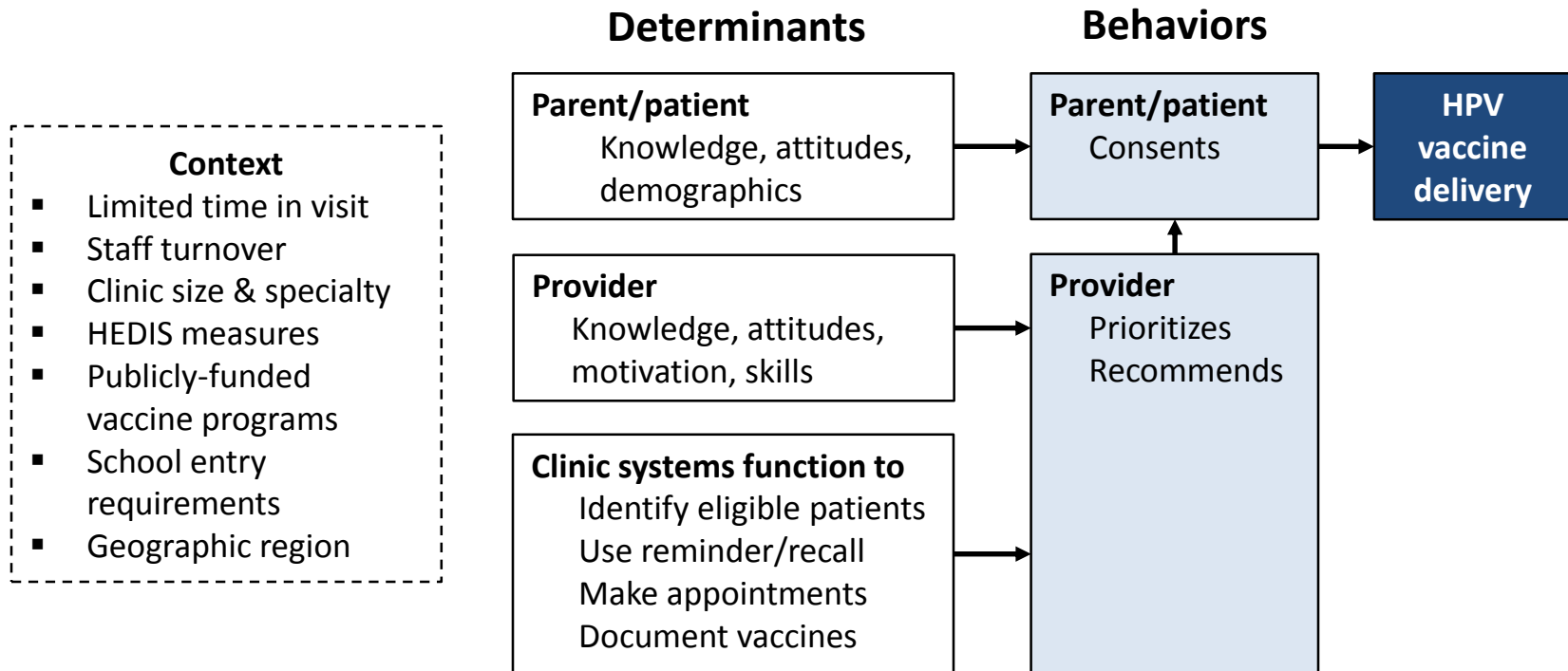
U.S. adolescent immunization coverage



U.S. adolescent immunization coverage



Conceptual Model of Low HPV Vaccine Uptake

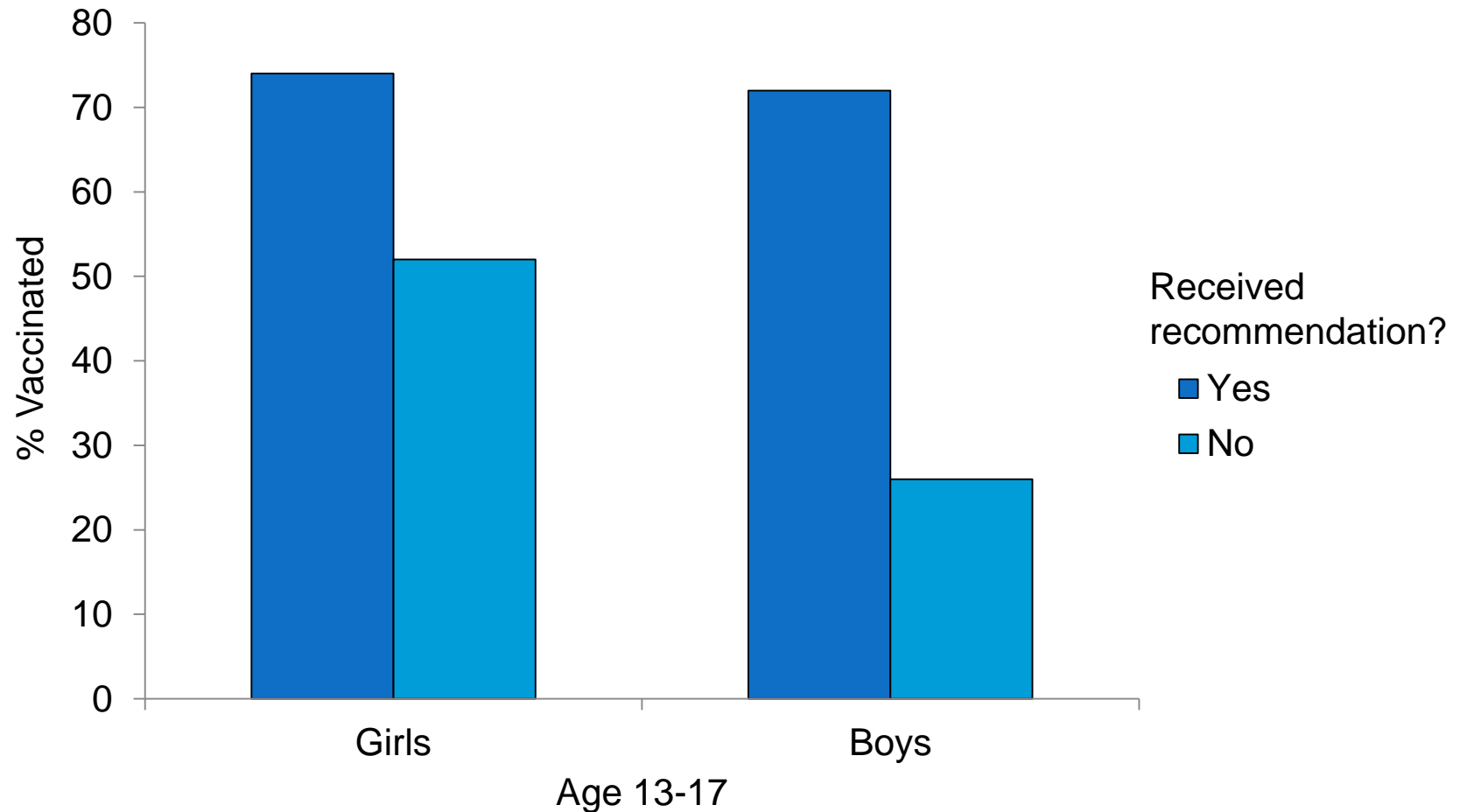


Role of parents

- Reasons for not getting HPV vaccine vary

	<u>Girls</u>	<u>Boys</u>
▫ Lack of knowledge	16%	16%
▫ Not needed	15%	18%
▫ Not recommended	13%	23%
▫ Safety/side effects	14%	7%
▫ Not sexually active	11%	8%

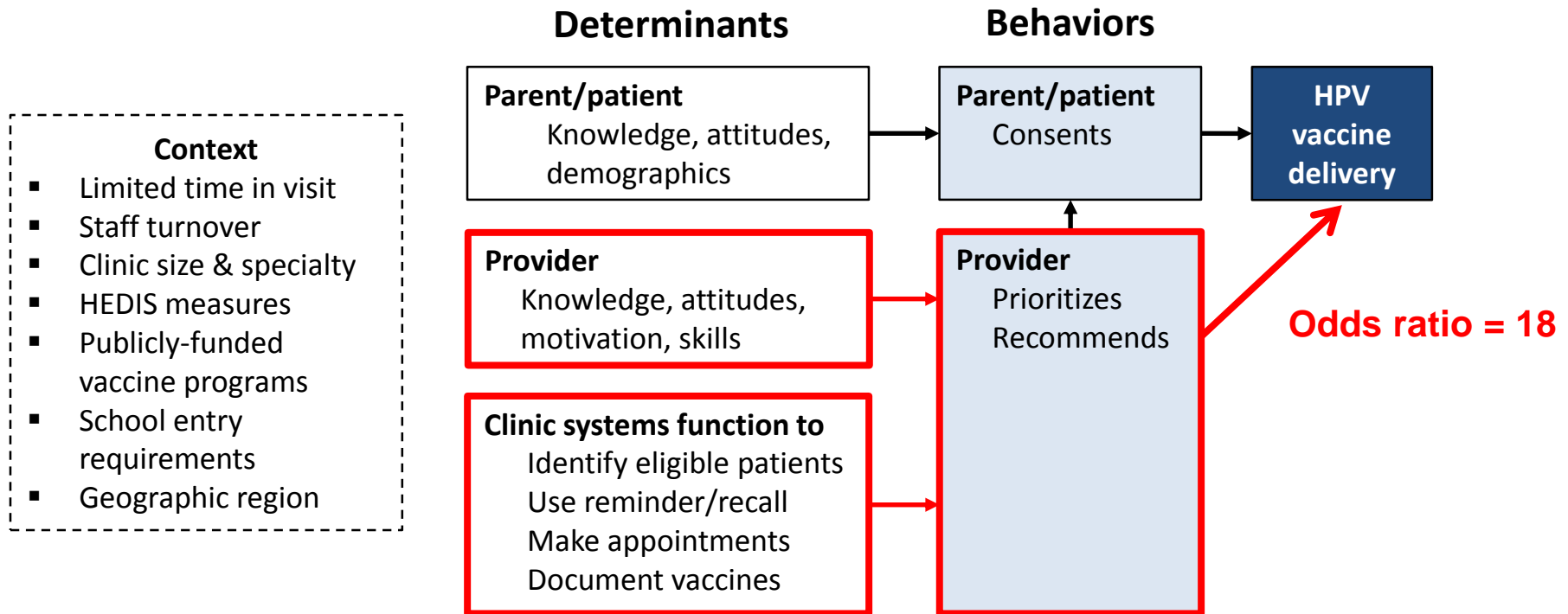
Role of healthcare providers



Recommendations need improvement

- No recommendation
 - 36% of girls and 58% of boys, ages 13-17, have not received a recommendation
- Weak recommendation
 - >60% of providers prefer to recommend HPV vaccine as “optional” for 11- to 12-year-olds

Conceptual Model of Low HPV Vaccine Uptake

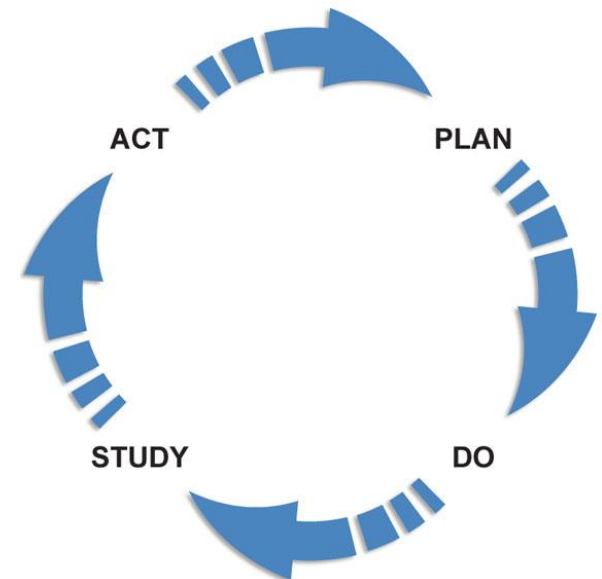


CDC's AFIX Model

Theory and prior evaluation

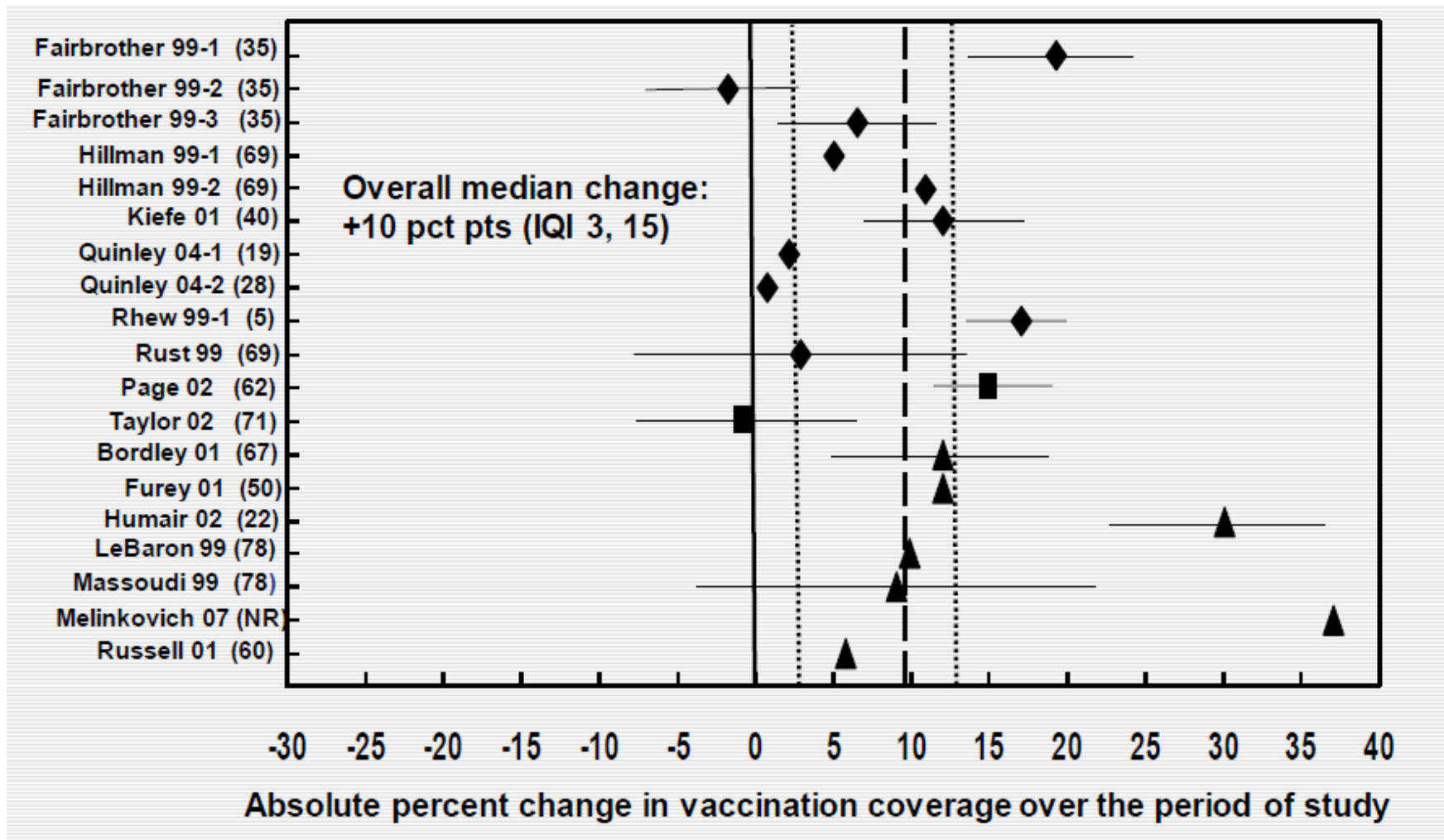
CDC's AFIX Model

- Informed by Continuous Quality Improvement
 - Data-driven approach
 - Use of short, PDSA cycles
 - Spirit of experimentation, collaboration



Coverage change for 15 studies of “assessment and feedback,” 1997-2007

Study design: ◆ RCT ■ observational ▲ low quality design



NC AFIX Pilot: 3-arm RCT with 91 clinics

In-person consultation

- Face-to-face meetings in clinics

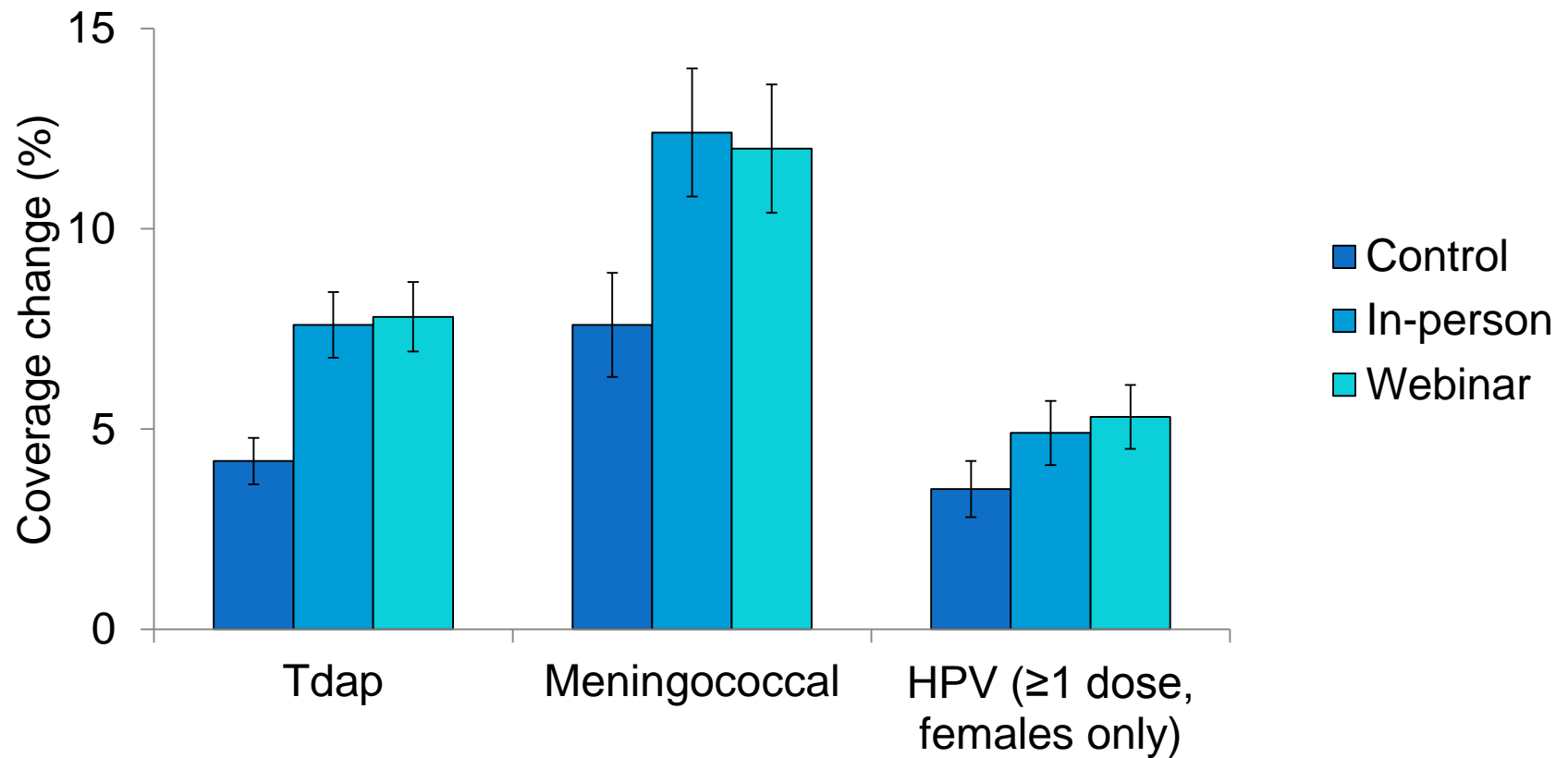
Webinar consultation

- Online meetings using video conferencing software

Control

- No intervention

Vaccine coverage changes at 5 months, ages 11-12



Additional findings

- AFIX impact disappeared by 12 months
- AFIX did little to improve catch-up vaccination for older adolescents, ages 13-18, at either time

UNC Adolescent AFIX Study

Aims, progress, and next steps

Goal: Increase HPV vaccination coverage

1. Develop an improved adolescent AFIX consultation, focusing specifically on HPV vaccination
2. Assess the longitudinal impact of consultations on adolescents' vaccination status
3. Compare the effectiveness of in-person and webinar delivery of AFIX consultations



Partners

Formative

Intervention

Training

Pilot

RCT




Finding	Intervention component
1. AFIX visits vary substantially in content, length, and participant role	<ul style="list-style-type: none"> • AFIX intervention protocol • AFIX training guide
2. Physicians rarely participate	<ul style="list-style-type: none"> • Goal to schedule with physicians and other vaccine providers
3. Incentives are likely inadequate	<ul style="list-style-type: none"> • CMEs for participation
4. Clinicians do not see HPV vaccination as a QI priority	<ul style="list-style-type: none"> • Immunization report card • Academic detailing on HPV vaccination
5. Competing demands overshadow AFIX	<ul style="list-style-type: none"> • QI action plan • Coaching emails w/ progress reports • Separation of AFIX and VFC visits

Immunization report card

- Communicate the problem
- Set a goal
- Give a solution

YOUR IMMUNIZATION REPORT CARD



1 REVIEW

your clinic's adolescent vaccine coverage.

ABC Pediatrics VFC 12345678 3/20/15

Your clinic has...	HPV		Meningococcal, ≥1 dose	Tdap
	Males, ≥1 dose	Females, ≥1 dose		
567 patients, age 11-12	20 %	45 %	68 %	73 %
756 patients, age 13-17	31 %	60 %	79 %	88 %

Coverage estimates are for patients in our state's immunization registry.

2 SET A GOAL

to improve HPV vaccine coverage in the next 6 months.

HPV Goal	Progress at 3 months	Progress at 6 months
57 patients, age 11-12		
76 patients, age 13-17		

Goals represent 10% of male and female patients in your clinic with records in our state's immunization registry. A typical clinic may give the first dose of HPV vaccine to 5% of their adolescent patients in 6 months. The goal is to double this rate.

3 RECOMMEND

HPV vaccination for adolescents, starting at age 11.

Offer HPV vaccine in the same direct way you recommend other vaccines. Try saying:

“Your child needs three shots today: meningitis, HPV, and Tdap vaccines.”

Your recommendation is the single biggest influence on parents' decisions to get HPV vaccine for their children. The vaccine produces a better immune response in younger adolescents. Vaccinating in the preteen years is best.

EARN FREE CMEs

on HPV vaccine communication: www.cdc.gov/vaccines/ed/hpv/

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Initial visit

2 SET A GOAL

to improve HPV vaccine coverage in the next 6 months.

HPV Goal	Progress at 3 months	Progress at 6 months
57 patients, age 11-12	38	
76 patients, age 13-17	46	

Goals represent 10% of male and female patients in your clinic with records in our state's immunization registry. A typical clinic may give the first dose of HPV vaccine to 5% of their adolescent patients in 6 months. The goal is to double this rate.



3 month follow up

QI action plan

Primary strategy

- Share HPV vaccination coverage estimates
- Discuss giving strong HPV vaccination recommendations

Secondary strategy

- Review CDC guidelines
- Train front desk staff
- Encourage physicians to sign standing orders
- Give educational materials to parents

Communication plan

- Share hard copies of Immunization Report Card
- Deliver a presentation during a staff meeting
- Provide e-mail addresses to state vaccination specialist

HPV Vaccination Quality Improvement ACTION PLAN

PRIMARY QI STRATEGY

Goal: Deliver strong recommendations for HPV vaccination for all patients, starting at age 11.

- Share HPV vaccine coverage estimates with all immunization staff.
- Discuss the need to improve HPV vaccine coverage through provider recommendations.

SECONDARY QI STRATEGY (choose one or more)

Goal: Reduce missed opportunities for HPV vaccination.

- Review CDC guidelines for HPV vaccination with all immunization staff, including the importance of concomitant vaccination.
- Train front desk staff on how to schedule appointments to support HPV vaccination.
- Sign standing orders for HPV vaccination.
- Provide informational materials on HPV vaccination to support parent and patient decision-making.
- Other _____

COMMUNICATION PLAN

- Share hard copies of Immunization Report Card.
- Deliver a brief presentation about this QI project during a regular staff meeting.
- Provide e-mail addresses of vaccine providers and office staff to receive periodic program updates.
- Other _____

Partners

Formative

Intervention

Training

Pilot

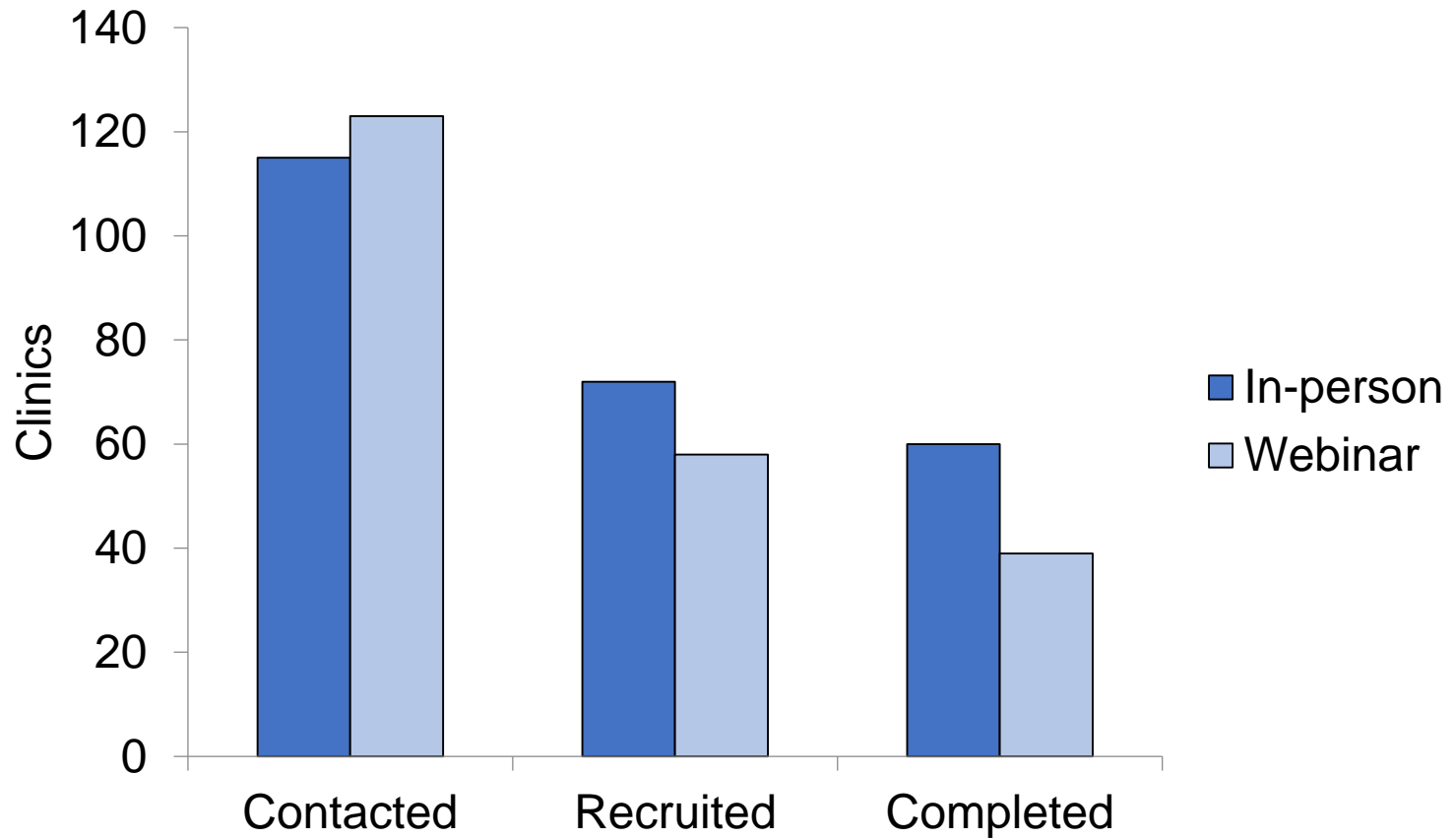
RCT



Pilot

- Each state delivered 1 in-person and 1-webinar AFIX consultation
- Research team refined intervention based on feedback

Recruitment to date



Evaluation component	Data source
1. Vaccination coverage at 0-, 3-, 6-, 9-, and 12-months A. HPV vaccine (≥ 1 dose) B. Other adolescent vaccines	<ul style="list-style-type: none"> State immunization registries
2. Fidelity	<ul style="list-style-type: none"> Participant observation of webinar consultations
3. Participant satisfaction, self-efficacy, engagement	<ul style="list-style-type: none"> Online surveys of healthcare providers
4. Delivery cost	<ul style="list-style-type: none"> State partner time logs and invoices
5. State partner feedback	<ul style="list-style-type: none"> Weekly TA calls

PHSSR lessons learned

Challenges

- Limitations in capacity for state health departments
- Lack of standardization in state vaccine registries
- Balancing “light touch” with impact

Facilitators

- Creative, highly-dedicated, supportive partners
- National movement for HPV vaccine quality improvement

Commentary and questions

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