

# Adolescent Vaccination: Taking It to the Schools

Immunization Site Preferences Among  
Primarily Hispanic Middle School Parents

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# Disclosures

- Punita Sunder and Jessica Tung have no disclosures.
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# Background

- There are several new vaccine recommendations for adolescents
- Adolescents are less likely than younger children to present for preventive care
- There are multiple barriers to adolescent immunization including issues of access, information tracking, consent, time, finances, disparities



# School-based Programs

- School-based immunization programs address several of these barriers
- Prior research indicates that 40% of primarily Hispanic elementary school parents prefer the school for immunization<sup>1</sup>
- Little is known about middle school parents' preferences and practices regarding adolescent vaccination

1. Middleman AB et al. J School Health 2002; 72(8):348-51.

# Purpose

As part of a larger, school-based immunization program...

- To gather information from middle school parents regarding:
  - Medical home enrollment
  - Immunization practices
  - Immunization site preferences
  - Immunization registry enrollment

# Methods



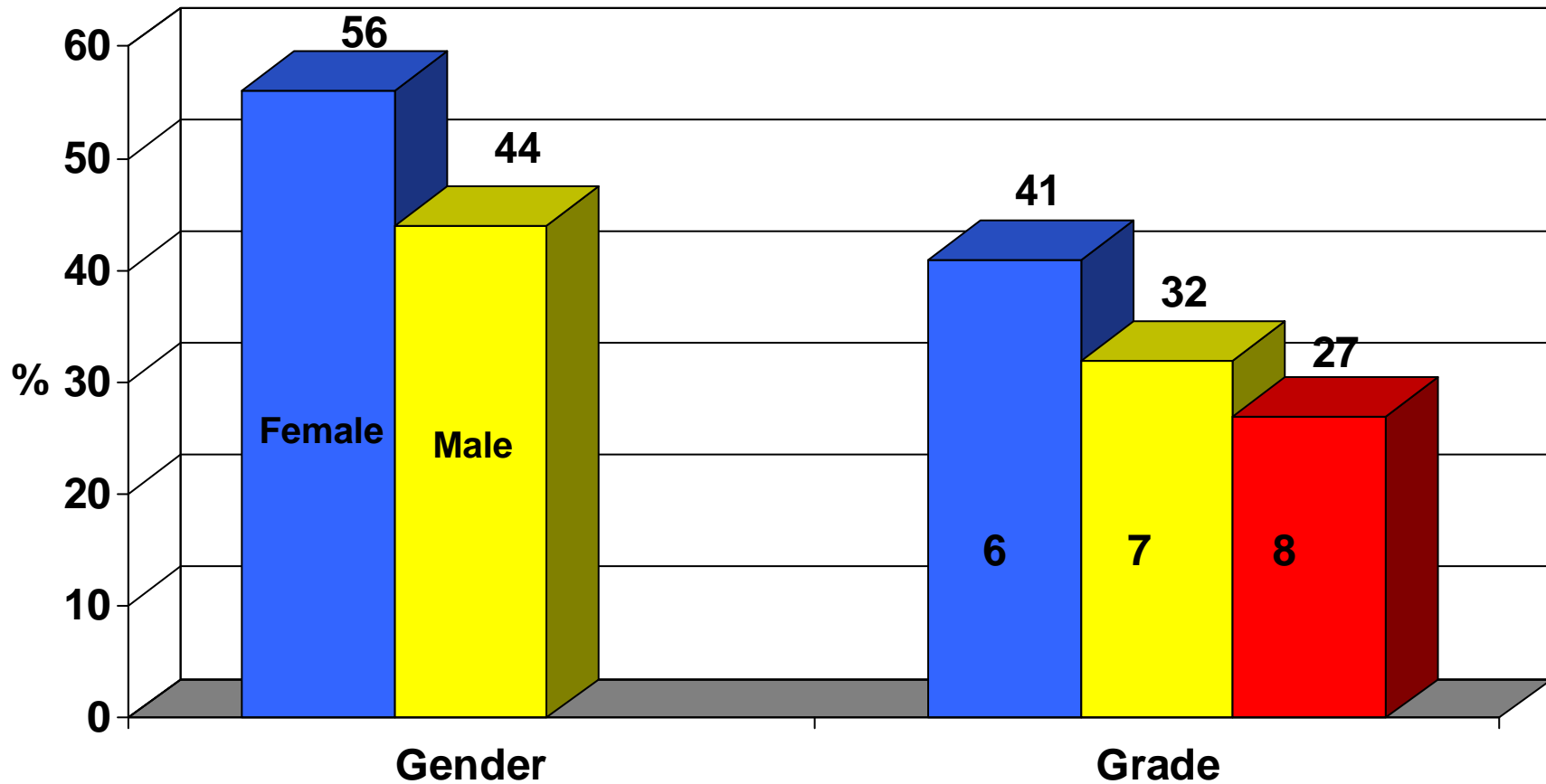
- Schools chosen based on %free lunch
- 8 middle schools participated
  - 4 schools had school-based clinics
  - 5 schools subsequently received immunization program
- Brief questionnaires distributed to all students; directed to parent/guardians
- Return of questionnaire resulted in entrance to a drawing for iPod shuffles
- Questionnaires collected from school nurse

# Study Population

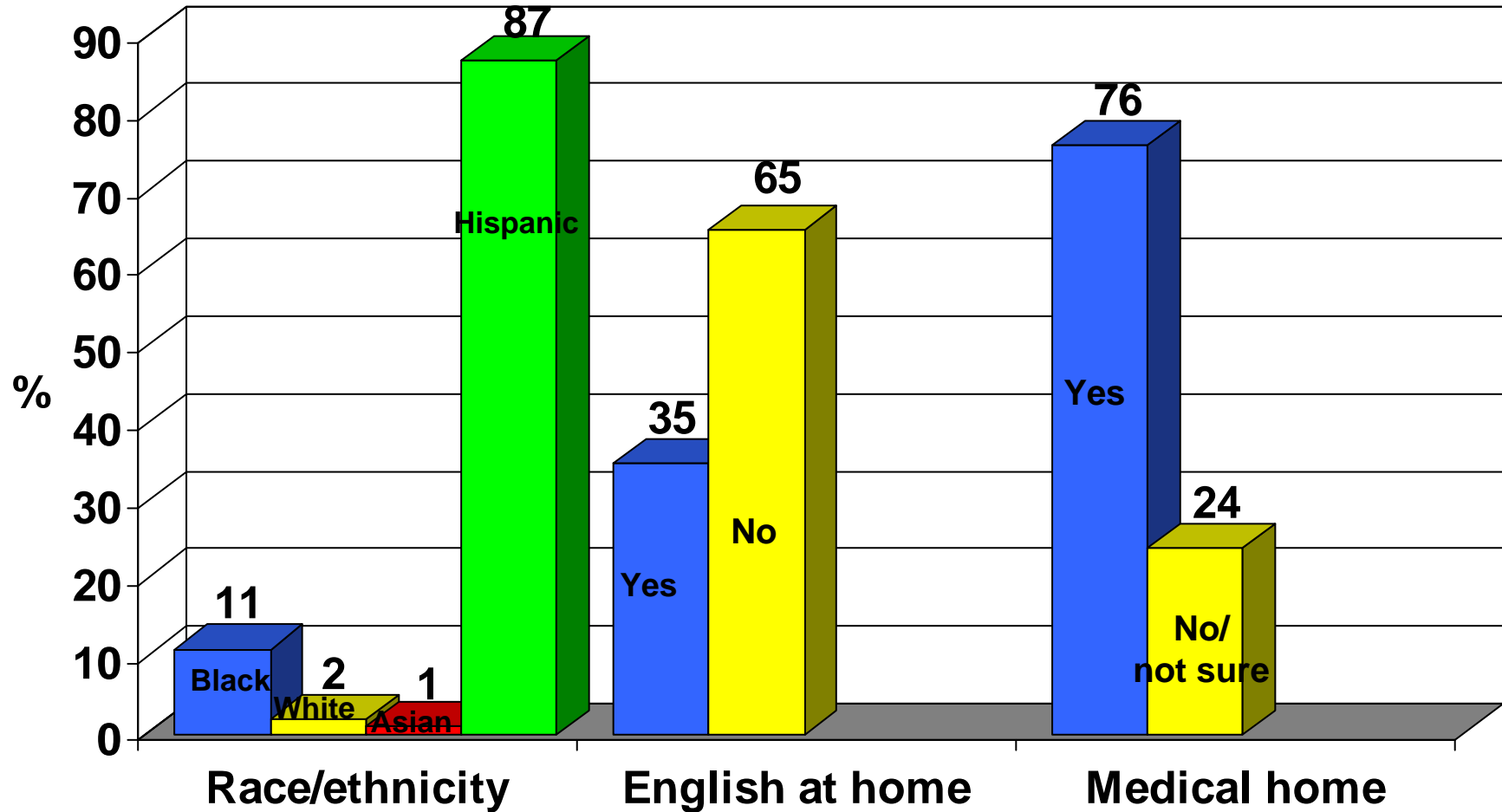
- ~ 7300 questionnaires distributed
- 1838 questionnaires returned
- Overall return rate: 25%
  - Higher return rate among schools also receiving immunization program
  - No significant difference in results when lower participation rate schools excluded
- Analyses: frequencies, chi-square, logistic regressions to determine odds ratios/CI



# Study Population (cont.)



# Study Population (cont.)



# Medical Home

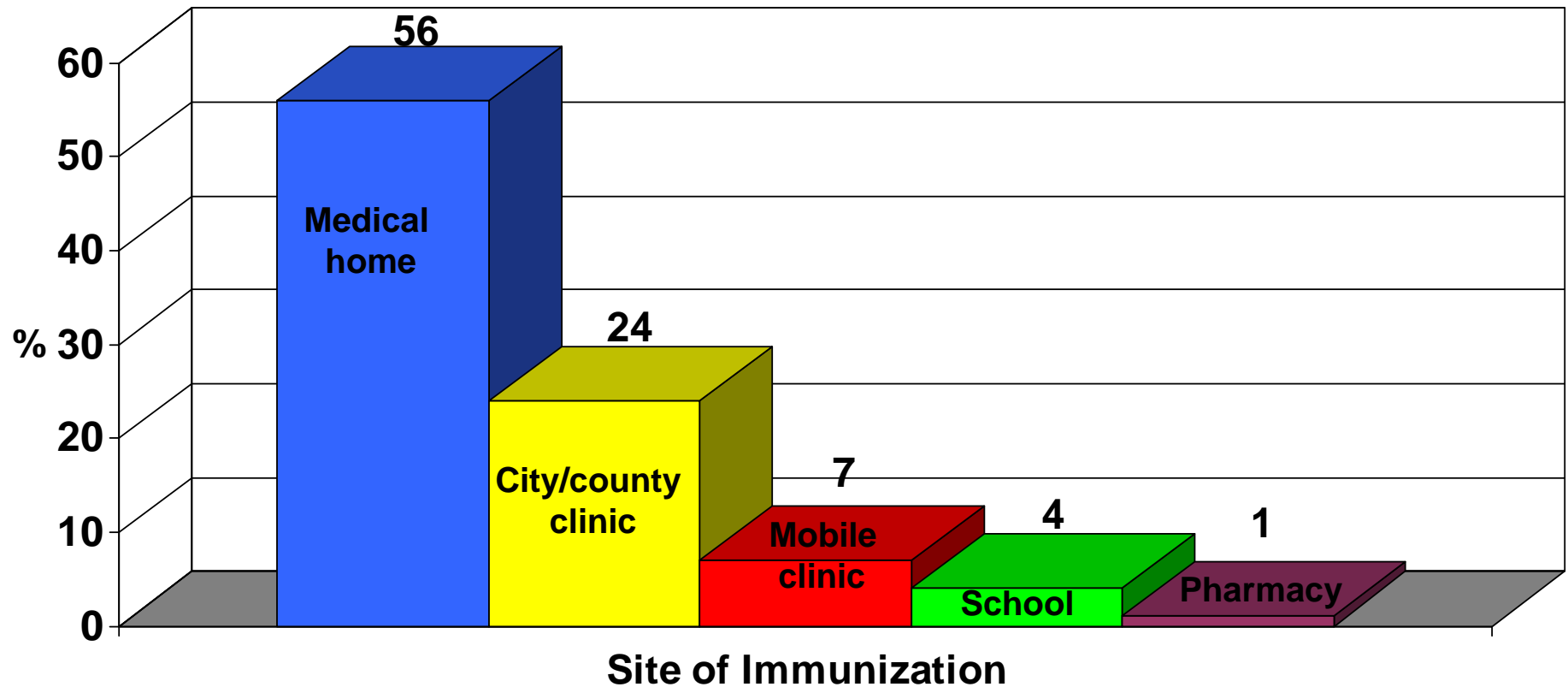
- 7% report medical home as school clinic
- 20% clinic/doctor's office at a hospital
- 73% clinic/doctor's office in neighborhood
- Those speaking primarily English at home had 2.4 greater odds of reporting a medical home (95% CI: 1.8-3.1)
- Enrollment in a medical home was not associated with presence of a school-based clinic

# Medical Home and Shots

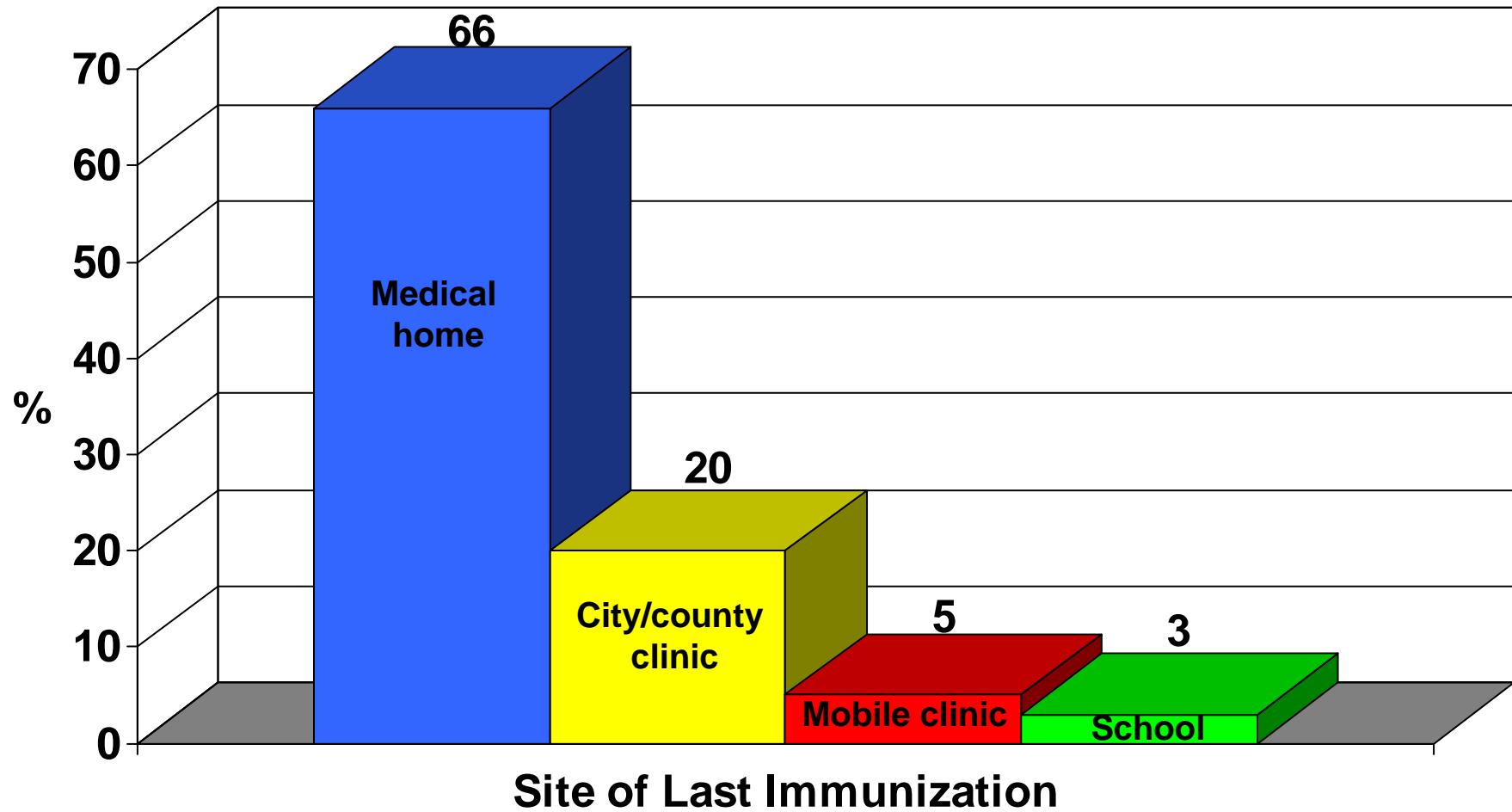
- Having a medical home is associated ( $P < 0.0001$ ) with:
  - having a shot more recently (in past 6 months):
    - With medical home – 32%
    - Without a medical home – 20%
  - having a medical visit more recently (in past 6 months):
    - With medical home – 58%
    - Without medical home – 23%

# Last Immunization

- 86% report a medical visit in past 2 years
- 71% report a shot in the past 2 years
- Site of last shot:



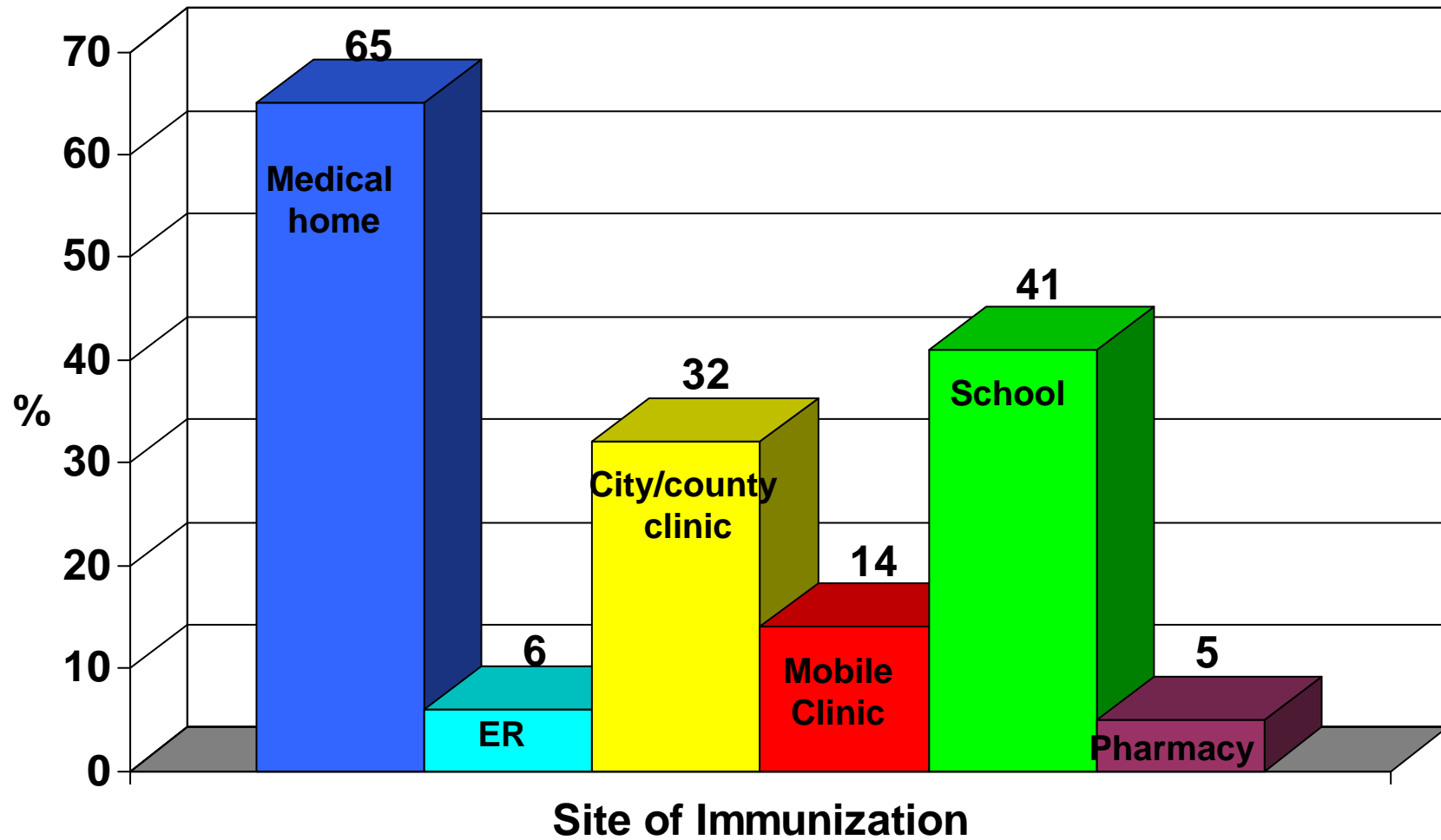
# Last Immunization Among Those with a Medical Home



# Knowledge

- Although 86% report a medical visit in the past 2 years, 38% answer “yes” to the question, “Are doctors recommending vaccines for 11-12 year olds?”
- Those speaking primarily English at home had a 1.5 greater odds of answering “yes” (95% CI: 1.2-1.8)

# Site Preference



## Site Preference (cont.)

Those not choosing school-based programs report the reason as:

“It is not the school’s business to worry about health issues.”	8%
“It is not safe to get shots at school.”	4%
“I want to be present when my child gets shots.”	67%
Several respondents reported concerns regarding record-keeping.	Written in

# Site Preference and Language

Those speaking primarily English at home were:

	OR	95% CI
More likely to choose medical home	1.6	1.3-2.0
Less likely to choose ER	0.6	0.4-0.9
Less likely to choose city/county clinic	0.7	0.5-0.8
Less likely to choose mobile clinic	0.5	0.4-0.7
Less likely to choose school-based program	0.5	0.4-0.6

# Site Preference and Language (cont.)

Among those who did not prefer school-based programs, those who wanted to be present for the shots were:

- More likely to be those speaking primarily English at home (OR=1.3, 95% CI:1.0-1.7)
- More likely to be those with a medical home (OR=1.5, 95% CI:1.0-2.0)

# Texas State Registry

- Some parents noted record-keeping as a concern for school-based programs
- Texas ImmTrac is an “opt-in” program
- 56% of the study population reported being enrolled in ImmTrac
- Those speaking primarily English at home were less likely to report registry enrollment (OR=0.4, 95% CI: 0.4-0.5)

# Limitations

- Potentially limited generalizability
- Low return rate (however, the sample size provided significant power)
- Self-reported data; validity of data unclear

# Conclusions

- Knowledge re: 11-12 year old shots is poor among primarily Hispanic parents
- Primary language at home is associated with knowledge of shots, medical home enrollment, registry enrollment, and immunization site preference
- Parents who do not prefer school-based immunization programs report a desire to be present for their child's shots
- Despite enrollment in medical homes, many adolescents receive shots at other sites

# Implications

- Preventive health care education/ access initiatives are needed for non-English speaking communities in Texas
- To improve success, school-based programs may choose to immunize with extended hours before or after school
- Multiple strategies including medical home and school-based immunization programs will be needed to access adolescents

# Acknowledgements

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