



A Review of Hepatitis B Vaccine Declinations in a Pediatric Patient Population

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Background

- Evidence suggests the hep. B vaccine offers protective immunity in **>98% of infants** and the US has experienced a **99% decline** in pediatric hep. B since 1991¹
- Recent changes to vaccine policies have increased uncertainty² and growing **vaccine skepticism** may contribute to delayed or declined pediatric hep. B vaccination
- Patients report having more questions about vaccines following the pandemic, particularly among ethnic minority groups³

Objectives

- Assess the current status of hep. B vaccine uptake among pediatric patients at PCHC Central
- Identify patient variables that could contribute to delayed or declined hep. B vaccination

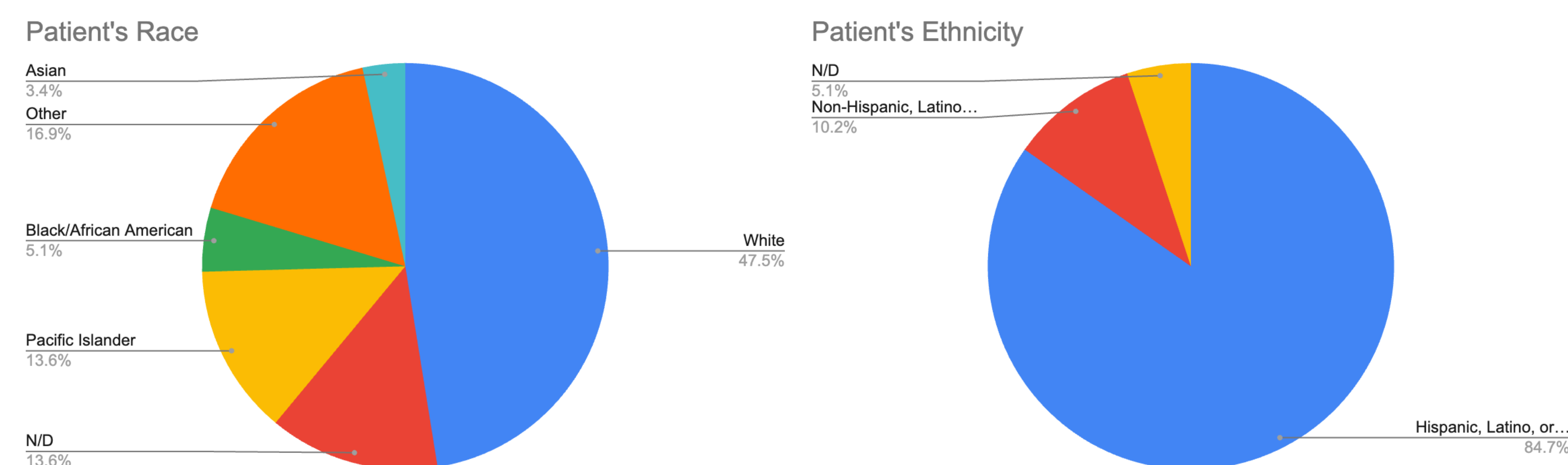
Methods

This project utilized a **quality improvement (QI)** initiative, a **literature review**, and a **quantitative chart audit and analysis**

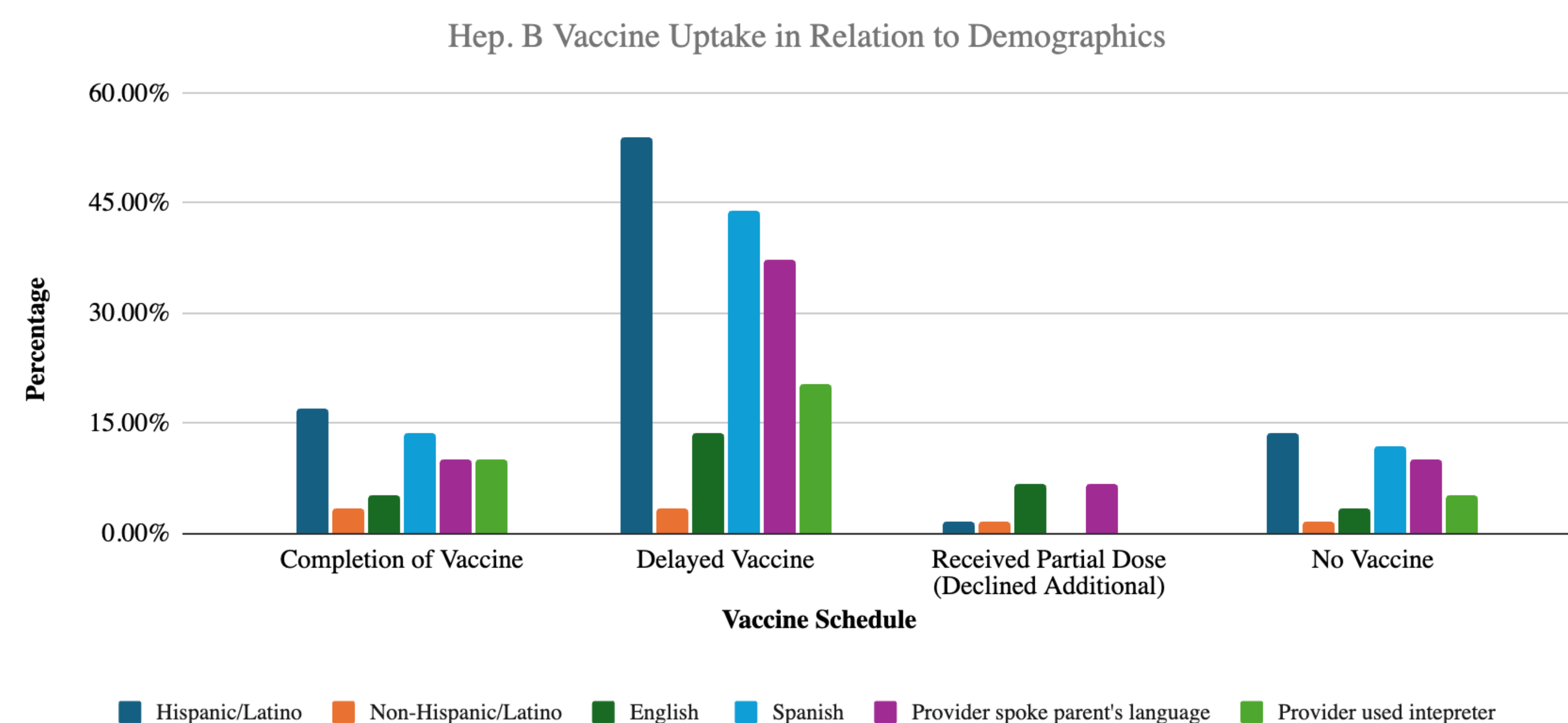
- 59 patient EMRs were reviewed from PCHC Central for demographic, provider, and vaccine information
- Patients were identified based on outstanding vaccine uptake as noted in the EMR (<3 doses)
 - Pediatric patients 0-6 y.o. Vaccine declination was noted by a signed *refusal to vaccinate* form

Literature review provided context on vaccine guidelines, barriers to vaccination, and factors influencing vaccine hesitancy

Results



Language	Hep. B vaccine	Vaccine Refusal Form	Outstanding Patients
28.8% English 69.5% Spanish Only 51.2% had a Spanish-speaking provider	20.3% completed 23.7% ⅓ done 40.7% ⅓ done 15.3% none	Of the 9 patients that completely declined vaccines, only 3 had signed the form 3 declined after ⅓ doses 1 declined after ⅔ doses	22.9% had not been seen within ~1 yr and had no upcoming appointments 17.1% had not been seen within ~6 mo and had no upcoming appointments 54.3% had upcoming appointments



Results

- The greatest delay in vaccine uptake was seen among patients of Hispanic or Latino origin, and among Spanish-speaking patients/parents
- When providers spoke the parent's language, vaccine uptake was still delayed
- Taken together, these results indicate ethnicity and/or language spoken, in this case, are not sufficient to explain delayed hep. B vaccine uptake
 - This could point to factors, other than language barriers, such as appointment availability, that contribute to delayed vaccine uptake

Conclusions and Next Steps

- Administering the first dose within 24 hours of birth is necessary for preventing mother-to-child transmission and lifelong liver disease⁴
- Research examining declination of the hep. B vaccine in early childhood is limited
- Few studies distinguish between true vaccine refusal and logistical delays in vaccine completion
- Further study is needed to look at patient demographics and vaccine declination patterns

References

