

Healthcare professional sentiments on the MenACWY vaccination schedule in the United States



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Introduction

Invasive meningococcal disease is unpredictable and transmissible through close contact and is responsible for outbreaks across the globe¹. It is also associated with a high case-fatality rate despite optimal medical intervention and can progress rapidly, with often only 24 hours occurring between the first symptom and death. Defeating all causes of meningitis is a priority for the World Health Organization (WHO), with IMD being of particular interest².

While cases of meningitis have been trending down in the United States for decades, there has been evidence of an uptick in cases since the pandemic, highlighted by a 10-year high of 422 confirmed cases in 2023^{3,4}. This troubling increase underscores the need to maintain vaccination rates to mitigate the risk of sporadic cases and disease outbreaks.

The current adolescent meningococcal vaccination schedule is to administer a first dose of a MenACWY vaccine at age 11-12 years with a booster dose given at age 16⁵. This provides protection for an age group at particular risk of the disease and with the highest carriage rate. Recently, the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention has undertaken a review of the adolescent meningococcal vaccination schedule in light of newly developed MenABCWY vaccines. Among several proposed schedules are two that would remove the first dose of MenACWY at age 11-12^{6,7}.

Ipsos partnered with Sanofi* to survey health care professionals' (including pediatricians, family practice physicians, nurse practitioners, and physician associates) opinions regarding the current adolescent meningococcal vaccination schedule, the perceived importance of this vaccination, and obtain their reactions to the potential removal of the MenACWY dose at age 11-12.

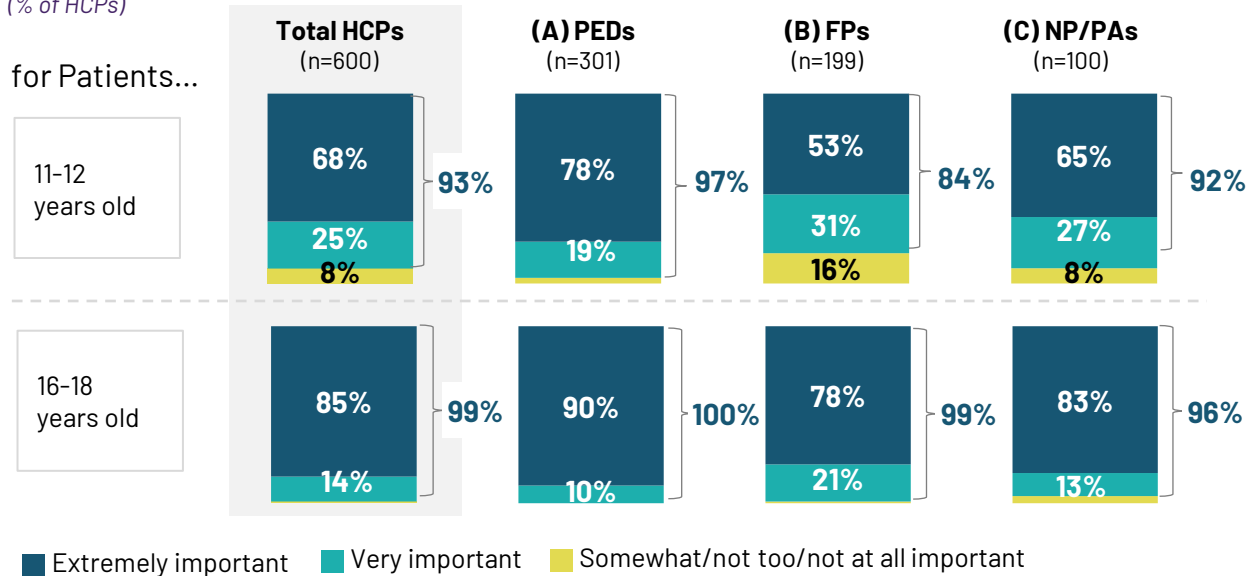


Findings from a Survey of HCPs

A survey of 600 Healthcare Professionals (HCPs) across the United States revealed that 93% of polled respondents believe it is extremely/very important to vaccinate 11-12-year-olds against meningococcal disease, while 99% believe it is extremely/very important to vaccinate 16-18 year olds.

Importance of Vaccination Against Meningococcal Disease

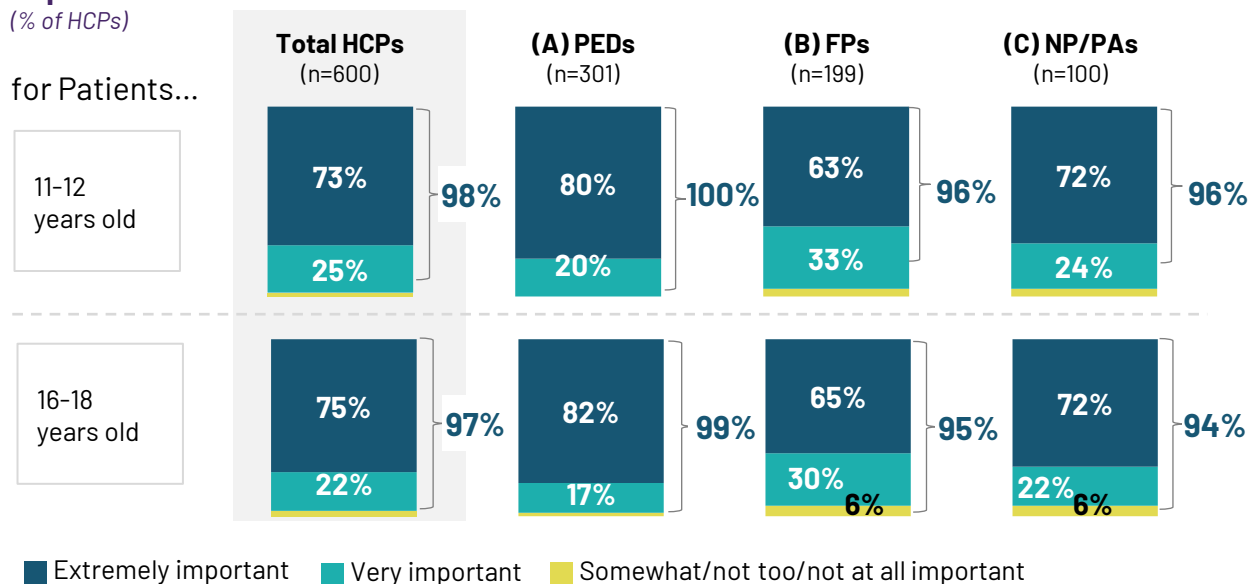
(% of HCPs)



Notably, this aligned closely with the percentage of respondents who believe it is extremely/very important for 11-12 and 16-18 year olds to attend recommended annual well-visits.

Importance of Well-Visits

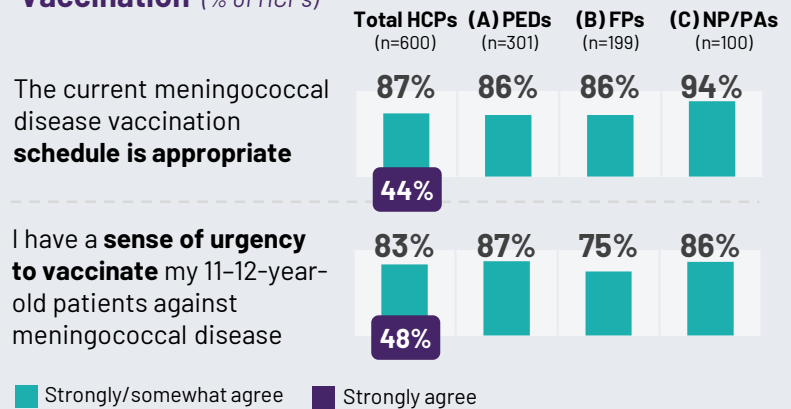
(% of HCPs)



87% of surveyed HCPs find the current vaccination schedule, which recommends one dose at age 11-12 and another at age 16, to be appropriate.

A similar percentage of survey respondents, 83%, strongly/somewhat agree that they have a sense of urgency to vaccinate their 11-12 year old patients against meningococcal disease.

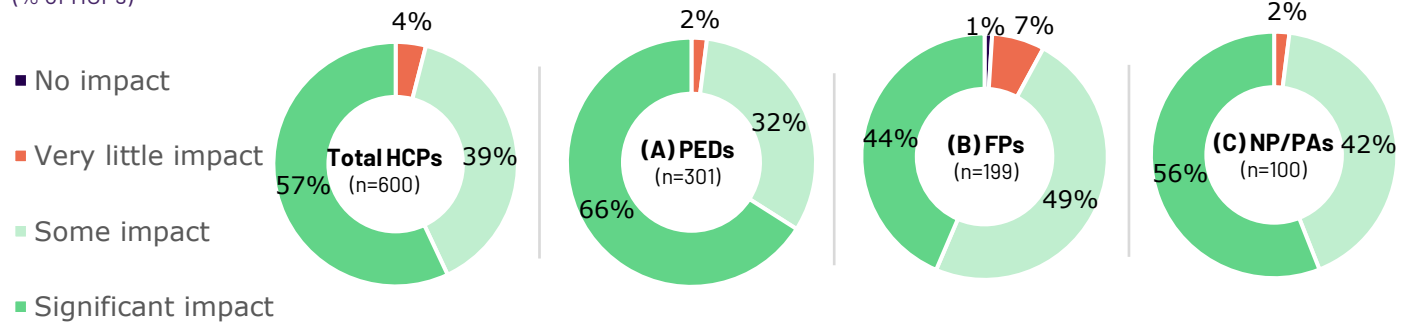
Attitudes Toward Meningococcal Disease and Vaccination (% of HCPs)



Surveyed HCPs almost universally see impact from the initial MenACWY dose. Ninety-six percent believe there is at least some impact on disease reduction from the 11-12 year old dose, with 57% categorizing the impact on disease reduction as "significant".

Level of Impact MenACWY Vaccination at 11-12 years old Has on Disease Reduction

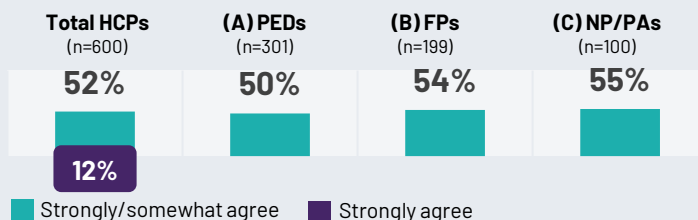
(% of HCPs)



Over half of surveyed HCPs (52%) agree at least somewhat that getting older adolescents into the office for well-care and the booster dose of MenACWY is difficult. This may factor into their sense of urgency to provide the vaccine at age 11-12.

Attitudes Toward Meningococcal Disease and Vaccination (% of HCPs)

It's **very difficult to get older adolescent patients (16-18 years old) back** to receive all doses required for full vaccination against meningococcal disease



55%

Conversely, 55% strongly or somewhat disagree that there is too much complexity surrounding meningococcal vaccination compared to other vaccine-preventable childhood diseases.

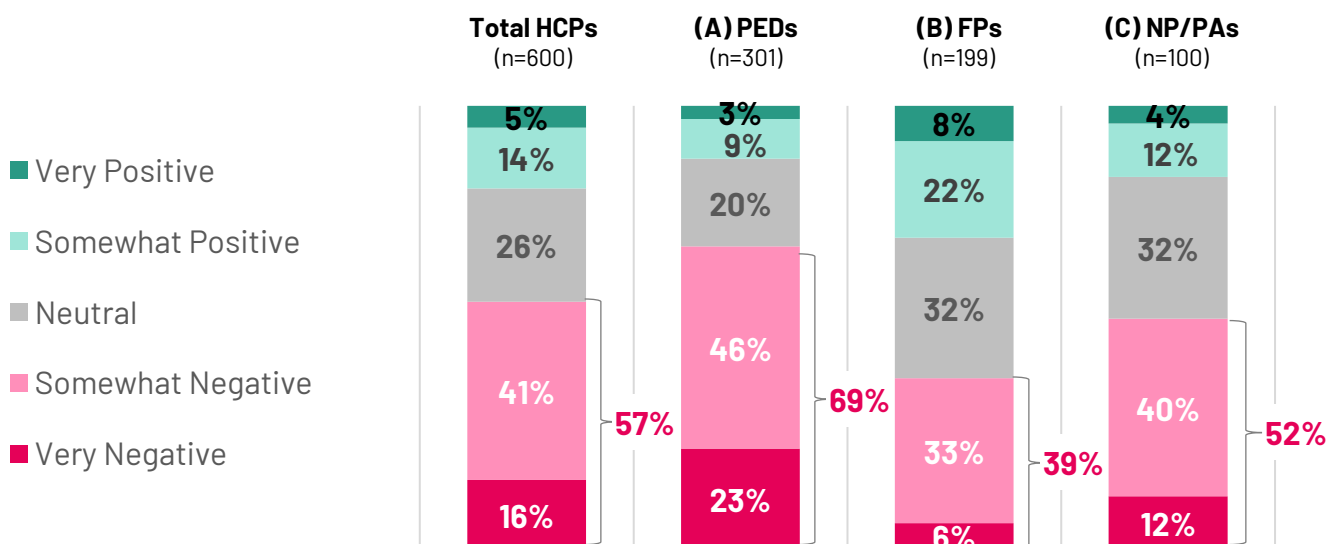
This is indicative of a vaccine-dosing schedule that is easily understood by the majority of HCPs, and suggests that the perceived challenge of vaccinating 16-18 year olds is more fundamental in nature than simply a byproduct of a complex vaccination regimen.



The significant perceived impact of the MenACWY dose at age 11-12 years is consistent with the limited interest surveyed physicians showed in removing this dose. Less than 1 in 5 respondents had an even somewhat positive reaction to this proposal, compared to 57% who had a very/somewhat negative reaction.

Overall Reaction to Potential Removal of Recommendation to Vaccinate 11-12-year-olds

(% of HCPs)



An even greater percentage of surveyed HCPs, **75%**, believe that the removal of the recommendation to vaccinate 11-12-year-olds would have at least some negative impacts on protection against meningococcal disease for younger adolescents.

Impact of Change to Vaccine Schedule

(% of HCPs)*

Total HCPS (n=600)

Protection against meningococcal disease for younger adolescents (11-12-year-olds)

■ % Very/Somewhat Negative ■ Some Positive Impact ■ Very Positive Impact



"Earlier protection is better. Also as kids get older, they get more noncompliant with coming for visits and therefore would be more likely to not get the protection at all." – Pediatrician

"Kids at 11 are entering 6th grade. This is the year that they change teachers every class thereby **increasing exposures to new students every hour.** Also puberty increases close contact with other adolescents. Continued participation in sports and club increase exposures" – Pediatrician

"This worries me because there is a risk of meningitis in kids younger than 16 and those kids would then be unprotected for more years." – Pediatrician

Some surveyed HCPs felt that removal of the recommendation to vaccinate 11-12-year-olds could negatively impact compliance with well-visits, which could result in negative spillover effects on other commonly administered vaccines.

Impact of Change to Vaccine Schedule

(% of HCPs)*

Total HCPS (n=600)

Compliance with well visits

■ % Very/Somewhat Negative ■ Some Positive Impact ■ Very Positive Impact

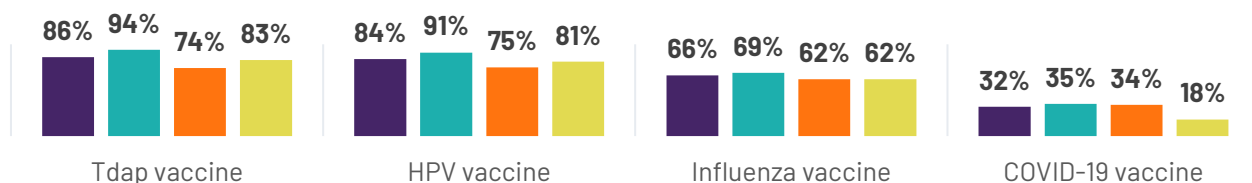


Indeed, the majority of surveyed HCPs report commonly co-administering Tdap, HPV, and influenza vaccines with the MenACWY vaccine at age 11-12. These numbers suggest the impact of years of hard work in strengthening the vaccination platform for 11-12-year-olds across an array of communicable diseases. One in three also report co-administering the COVID-19 vaccine. Based on this study among HCPs, their views and behaviors suggest that any impact on MenACWY vaccination rates and/or compliance with overall well-visits could reasonably impact administration of these other important vaccines.

Vaccines Co-Administered With Meningitis Vaccine

(% of HCPs)

■ Total ■ (A) Peds ■ (B) FPs ■ (C) NP/PAs

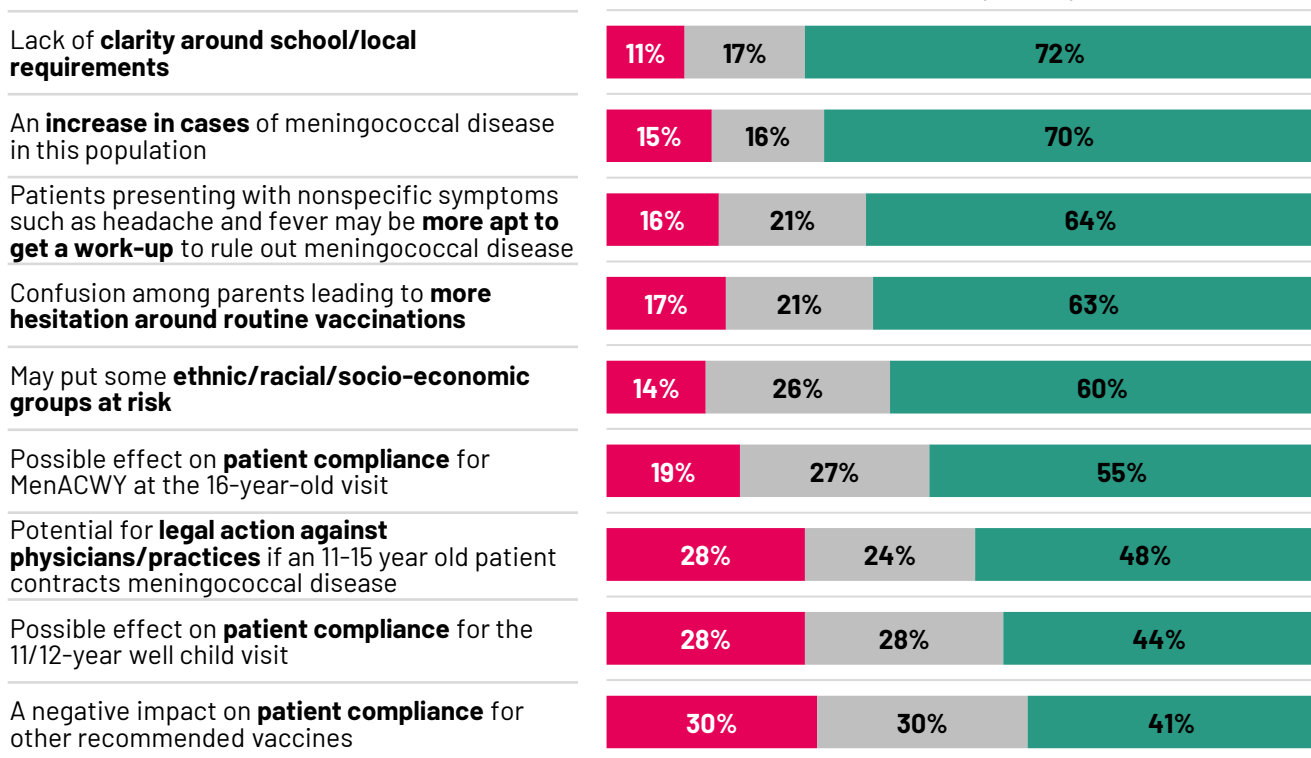


Most surveyed HCPs agreed that there are several potential negative consequences that could be associated with the removal of the recommendation to vaccinate 11-12-year-olds with MenACWY, particularly the potential lack of clarity around school / local requirements (72%) and an impact on equitable prevention of meningococcal disease (60%). Seven in ten surveyed HCPs believe that an increase in cases of meningococcal disease in this population is at least somewhat likely should the recommendation be removed. Additional consequences considered at least somewhat likely by the majority of respondents include parent confusion leading to vaccine hesitancy (63%), the need to have an increased concern for younger adolescents with symptoms that could suggest meningococcal disease (64%), and lack of compliance for MenACWY at the 16 year old well visit (55%).

Unintended Consequences of Removal of Recommendation to Vaccinate 11-12-year-olds

(% of HCPs)

Total HCPs (n=600)



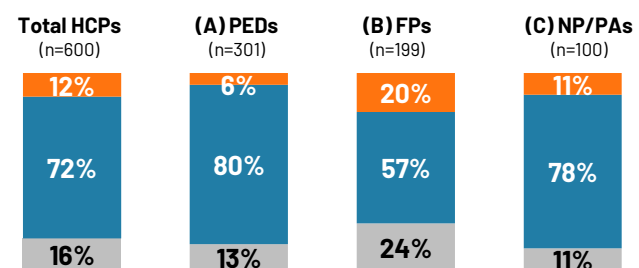
■ Extremely/very/somewhat unlikely ■ Neither likely nor unlikely ■ Extremely/very/somewhat likely

To close the survey, these HCPs were asked to indicate how they would vote if they were a part of the Advisory Committee on Immunization Practices (ACIP), and the consensus was quite clear: 72% of respondents would cast their hypothetical vote to keep the first dose at 11-12 years of age, compared to just 12% who would vote to remove the recommendation. The difference is particularly stark among surveyed pediatricians, of whom 80% would vote to keep the first dose at 11-12 years old.

Action Taken if Respondent was on ACIP

(% of HCPs)

- Vote to **remove** the recommendation to vaccinate against MenACWY at the 11/12-year-old visit
- Vote to **keep** the 1st dose at 11-12 years old
- Don't know/Not sure



Implications

This survey suggests the strength of support found among healthcare professionals for maximizing protection against meningococcal disease, as vaccination is one important tool society has to combat the risk posed by meningococcal disease.

This study provides important and novel insights regarding opinions of the current vaccination schedule among professionals who are often on the front lines of meningococcal disease prevention. Overall, there was clear support for maintaining the MenACWY vaccination at 11-12 years of age, coupled with clear concern about unintended consequences that may arise if the recommendation to vaccinate at age 11-12 is eliminated. HCPs surveyed were hesitant to show support for a situation that could enable any of those unintended consequences to materialize.

Surveyed physicians felt that there would be a risk to their adolescent patients if this recommendation was removed, such as leaving some patients totally unprotected against meningococcal disease considering the challenges currently associated with booster dose compliance. Several examples in recent years have demonstrated that diseases can return when vaccination coverage rates lapse, and that any dip in vaccination rates can pose a risk to broader public health⁸.

Another key concern is the potentially disruptive message sent to parents by recommending a key change to a longstanding vaccination schedule. In an era of heightened vaccine hesitancy following the COVID-19 pandemic, removal of the recommendation to vaccinate 11-12-year-olds against meningococcal disease could exacerbate this sentiment at a time when the public trust in the healthcare system is already low⁹.

The results of this research provide an additional piece of information to consider and can be helpful to guide broader discussions regarding public health policy around the prevention of meningococcal disease. Similarly, these survey results can be used to inform the acceptability domain of the ACIP's evidence-to-recommendations framework. The sentiment of the majority HCPs in this study is clear: the recommendation to vaccinate 11-12-year-olds against meningococcal disease should remain in place.



Methodology

Ipsos fielded a 10-minute, self-administered, online cross-sectional survey among HCPs currently practicing in the United States during the period between March 29 to April 22, 2024. Respondents were recruited from opt-in panels of HCPs across the country.

In order, to participate in the survey, all respondents had to be:

- Board certified
- A licensed family practice physician, pediatrician, or a nurse practitioner/physician associate affiliated with a pediatrician
- Handling a patient load of at least 50 adolescent patients per month if a pediatrician, or 30 per month if a family practice physician
- Advising on or administering vaccines and stock MenACWY vaccines in practice
- Located primarily in a community-based practice or private health clinic

The following exclusion criteria was applied to the sample:

- Unwilling to provide informed consent to participate in the study
- In practice less than 1 year
- Spends less than 75% of professional time providing direct patient care
- Less than 15% of practice patient population is 11-12 years of age if a pediatrician, or less than 10% if a family medicine physician
- Not involved in advising or administering vaccines
- Meningococcal ACWY vaccine is not stocked in practice
- Practice located in MN, ME, or VT (due to transparency reporting laws in these states for HCPs)
- Has a conflict of interest for study participation (respondent or member of household is employed by the pharmaceutical industry, or affiliated communication/advertising agency on a full-time or consultancy basis)

The final sample size of **600** HCPs consisted of **301** Pediatricians, **199** Family Practice Physicians, and **100** Nurse Practitioners or physician associates (NP/PAs) practicing in pediatric or family medicine offices. No post-hoc weights were applied to the data, and the findings reflect the opinion of these respondents only.

Respondent Demographics

Gender



Years in Practice

19.2yrs

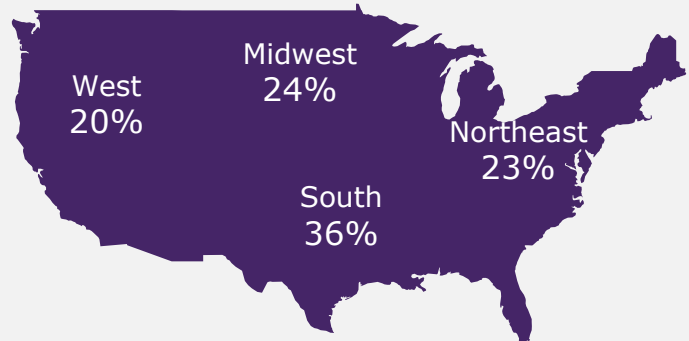


Time Spent in Direct Patient Care (on average)

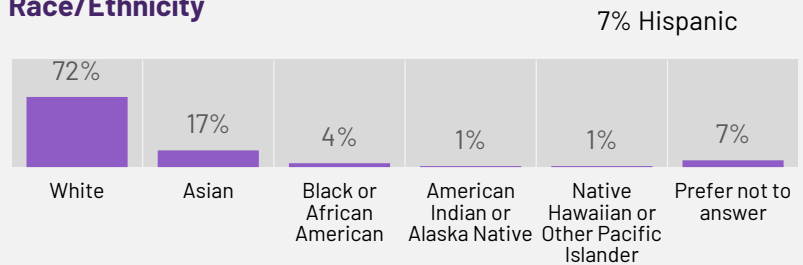
95%



Practice Location - Region



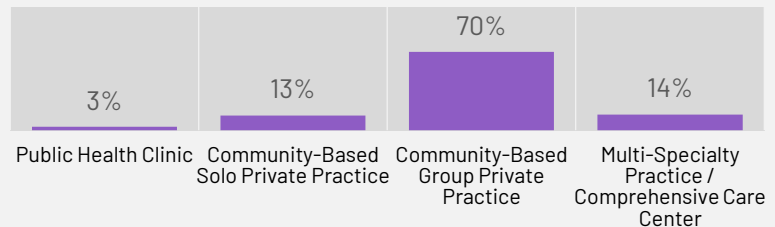
Race/Ethnicity



Practice Location Type



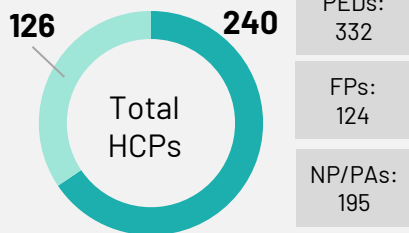
Practice Setting



Patient Load

Mean # patients per month...

Age 18+ Age 0-17



Patient Volume By Age Group

Avg. % of patients in each age group...

	Total	PED	FP	NP/PA
0 to 5 years old	23%	32%	12%	21%
6 to 10 years old	18%	23%	10%	16%
11 to 12 years old	13%	15%	10%	14%
13 to 15 years old	13%	14%	10%	13%
16 to 18 years old	12%	12%	12%	12%
Over 18 years old	22%	4%	47%	47%

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