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Consumer and Patient Perspectives and Satisfaction with Medical Care Provided by PAs

AAPA 2020: Research in Action

Andrzej Kozikowski, PhD; Colette Jeffery, MA;
Kasey Kavanaugh, MPH; Grady Barnhill, MEd;
Sheila Mauldin, MNM; Dawn Morton-Rias, Ed D, PA-C

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AGENDA

Background	Purpose of the study and research questions	Methods
Results	Limitations	Key Findings and Conclusions

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BACKGROUND

- The PA profession continues to grow, and PA contributions are increasingly recognized and relied upon in healthcare
- Continually assessing consumer and patient perspectives regarding PAs is important
 - Patient satisfaction is an important indicator of healthcare quality and correlates with adherence to treatment, health outcomes, and patients continuing to see the same provider
 - Demographic characteristics, self-reported health, healthcare utilization and health insurance may be important factors that predict patient willingness to see PAs for their medical needs

- Hooker RS, Moloney-Johns AJ, McFarland MM. Patient satisfaction with physician assistant/associate care: an international scoping review. *Human Resources for Health*. 2019 Dec 1;17(1):104.
- Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: a systematic review. *Perspectives in public health*. 2017 Mar;137(2):89-101.

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**BACKGROUND:
RESEARCH GAP**

- Research on determinants of patient satisfaction is mixed and a limited number of studies have investigated how different patient groups perceive the quality of care delivered by PAs as well as willingness to seek care from PAs

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STUDY PURPOSE AND RESEARCH QUESTIONS

- To explore patient and consumer perspectives on and satisfaction with medical care provided by PAs:
 - What proportion of the public report having ever been treated by PAs?
 - Of those that have been treated:
 - how satisfied were they with the medical care received;
 - how likely are they to see a PA again for their medical needs; and
 - would they recommend a friend or family member see a PA for their medical needs
 - Of those who have not been treated by PAs:
 - would they be willing to see a PA for their medical needs
 - How does satisfaction, likelihood of seeing a PA again, and recommending PAs as well as willingness to see a PA vary by demographic characteristics, number of provider visits in the past year, self-reported health, and health insurance?

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METHODS

- We conducted an online survey in November-December 2018 using quota sampling to approximate the proportions in gender, age, race/ethnicity, education, geographical region, and setting (N=1,388) of the US population
- The questionnaire assessed whether participants were ever treated by a PA; those who indicated yes were asked about their satisfaction with the medical care received, the likelihood of seeing a PA again, and if they would recommend a family member or friend see a PA
- Participants who reported never being treated by a PA were assessed on their willingness to seek treatment from PAs
- The survey also assessed demographic characteristics (age, gender, race/ethnicity, education, urban-suburban-rural home setting), number of visits to provider in the last 12 months, health status (excellent, good, fair, poor) and health insurance type
- Descriptive statistics, Pearson chi-square/Fisher's exact test, Cramer's V, and multivariate logistic regression were conducted using R



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METHODS

Predictors

- Age
- Gender
- Race/ethnicity
- Education
- Setting (suburban, rural, urban)
- Health status (excellent to poor)
- Number of provider visits in past 12 months
- Health insurance type

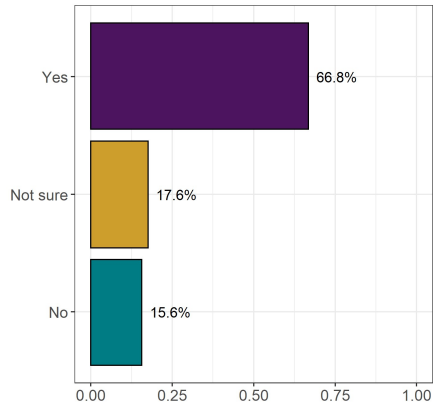
Outcomes

- Have you ever been treated by a PA?
- How satisfied were you with the medical care received?
- How likely are you to see a PA again for your medical needs?
- How likely are you to recommend a friend or family member to see a PA for their medical needs?
- Would you be willing to see a PA for your medical needs?

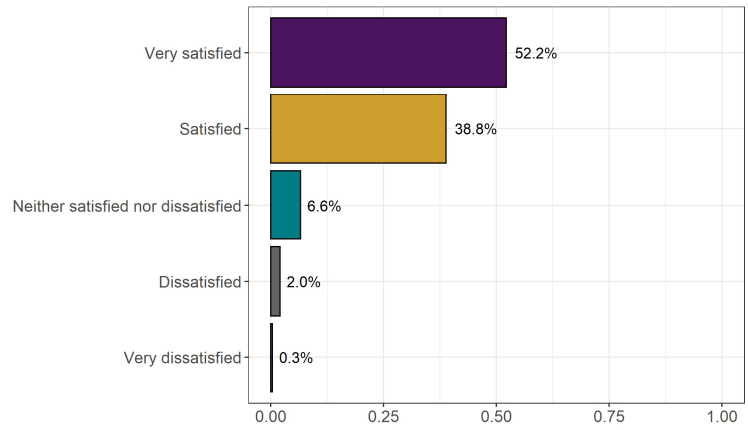
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DESCRIPTIVE RESULTS

Have you ever been treated by a PA?



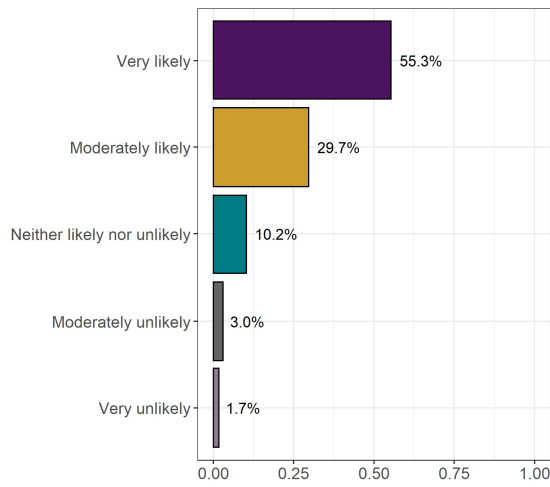
How satisfied were you with the medical care received?



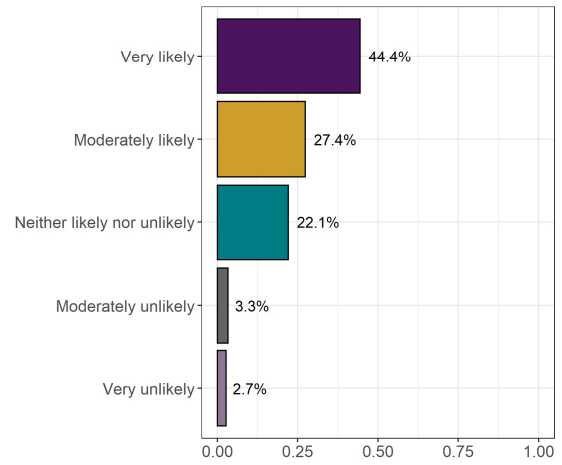
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DESCRIPTIVE RESULTS

How likely are you to see a PA again for your medical needs?

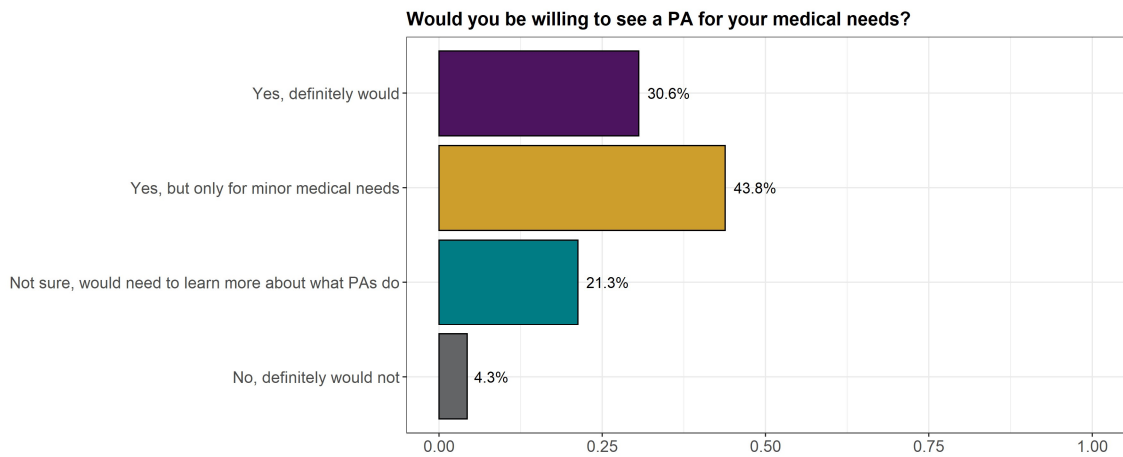


How likely are you to recommend a friend or family member to see a PA for their medical needs?



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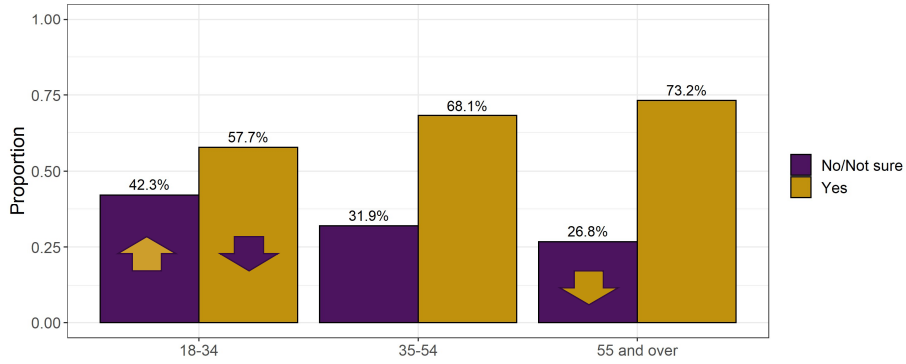
DESCRIPTIVE RESULTS



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UNIVARIATE RESULTS: EVER TREATED BY PA BY AGE GROUPS

Ever treated by PA by age group
Pearson's Chi-Squared Test; $p < 0.001$
Cramer's V 0.13

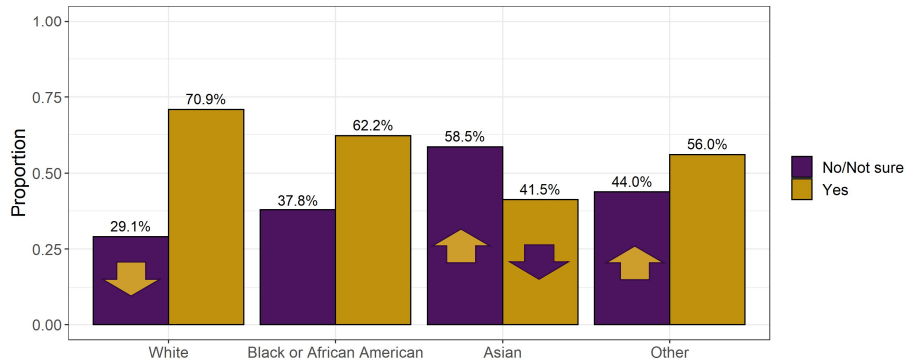


Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: EVER TREATED BY PA BY RACE

Ever treated by PA by race
Pearson's Chi-Squared Test; $p < 0.001$
Cramer's V 0.17

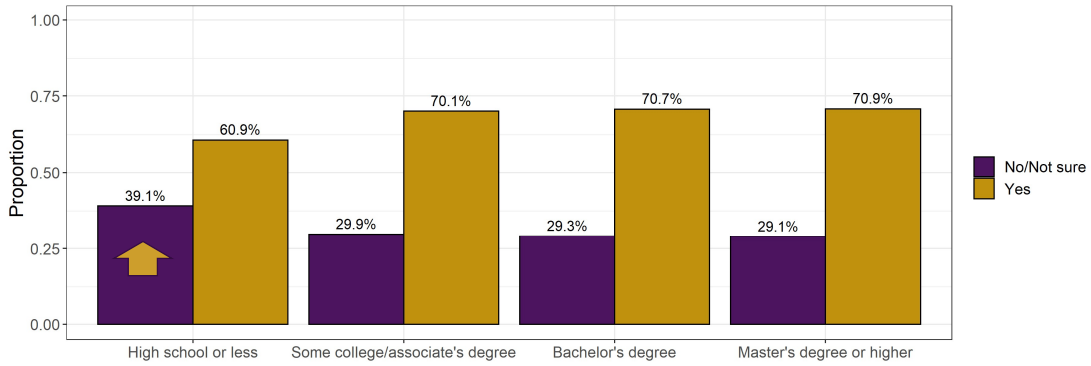


Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: EVER TREATED BY PA BY EDUCATION

Ever treated by PA by education
Pearson's Chi-Squared Test; p=0.003
Cramer's V 0.10



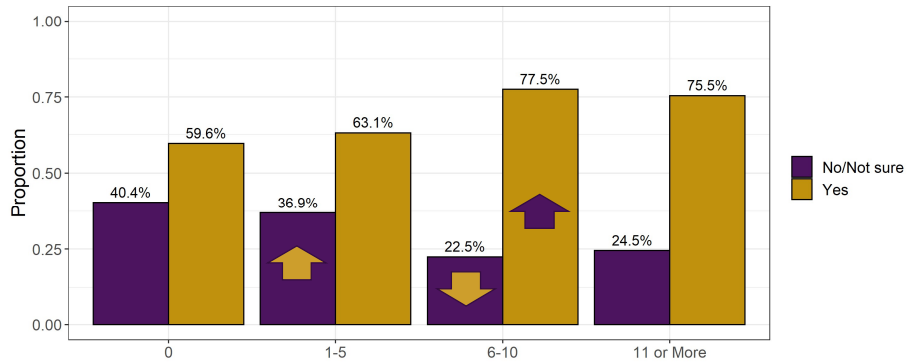
Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: EVER TREATED BY PA BY NUMBER OF PROVIDER VISITS IN PAST 12 MONTHS

Ever treated by PA by provider visits in past 12 months

Pearson's Chi-Squared Test; $p < 0.001$
Cramer's V 0.13



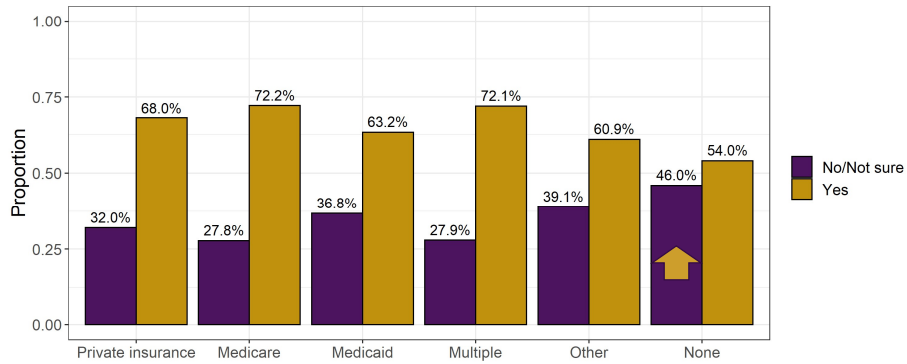
Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: EVER TREATED BY PA BY HEALTH INSURANCE TYPE

Ever treated by PA by health insurance type

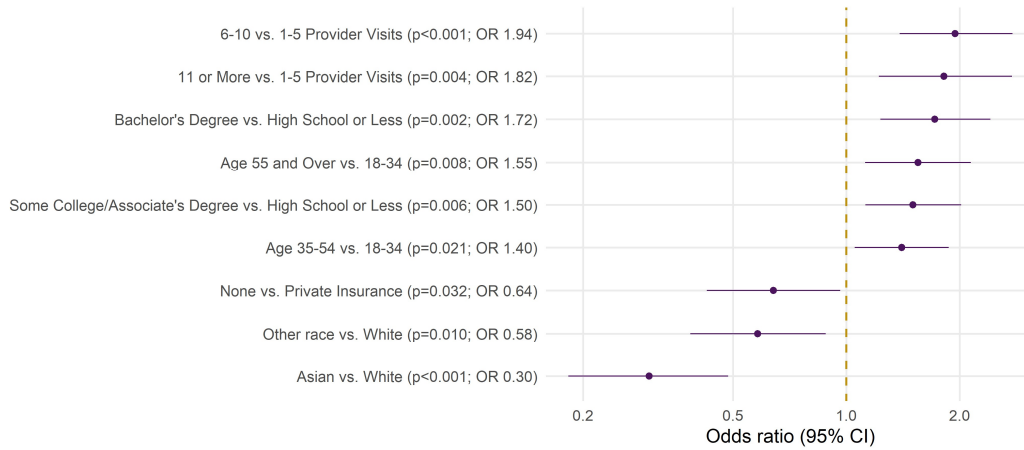
Pearson's Chi-Squared Test; $p=0.003$
Cramer's V 0.11



Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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MULTIVARIATE RESULTS: EVER TREATED BY PA LOGISTIC MODEL

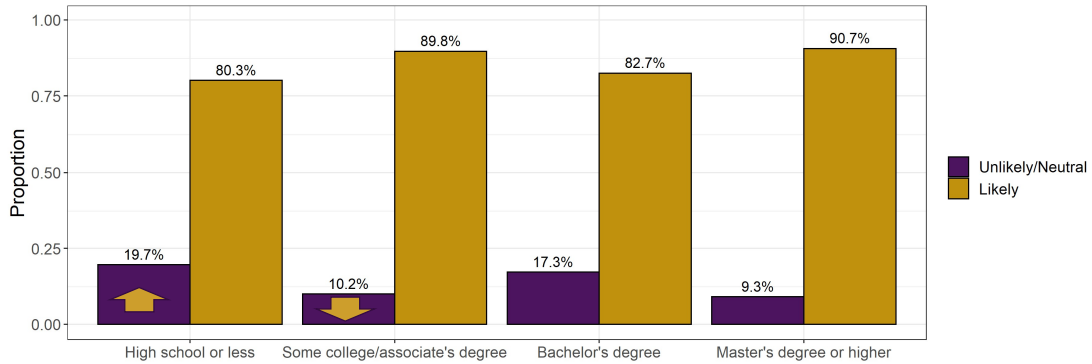


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UNIVARIATE RESULTS: LIKELIHOOD OF SEEING PA AGAIN FOR MEDICAL NEEDS BY EDUCATION

Likelihood of seeing a PA again by education

Pearson's Chi-Squared Test; $p=0.002$
Cramer's V 0.13

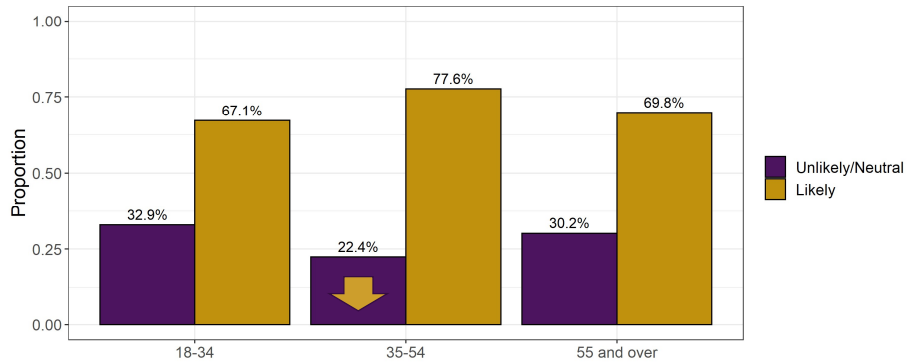


Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: LIKELIHOOD TO RECOMMEND PA BY AGE

Likelihood of recommending PA by age groups
Pearson's Chi-Squared Test; $p=0.012$
Cramer's V 0.10



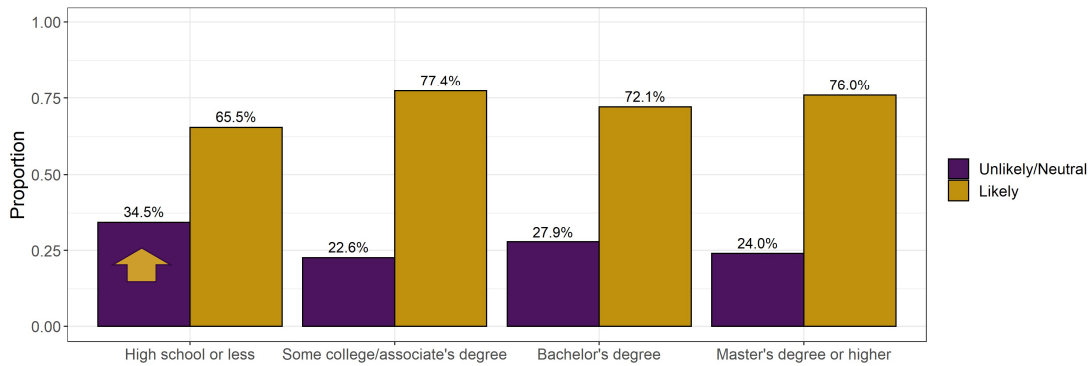
Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: LIKELIHOOD TO RECOMMEND PA BY EDUCATION

Likelihood of recommending PA by education

Pearson's Chi-Squared Test; $p=0.009$
Cramer's V 0.11



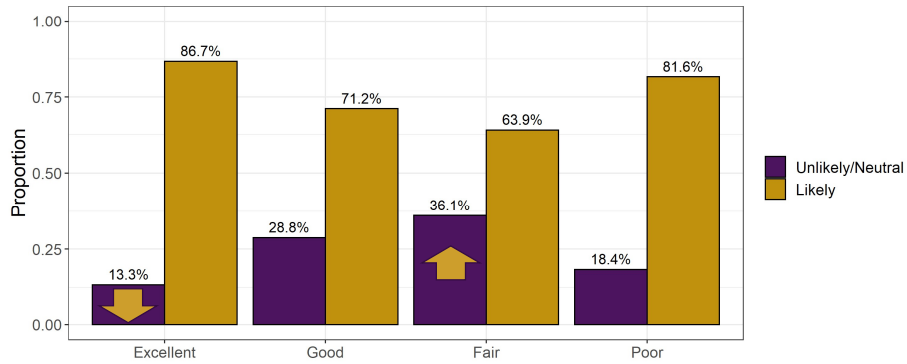
Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: LIKELIHOOD TO RECOMMEND PA BY HEALTH STATUS

Likelihood of recommending PA by health

Pearson's Chi-Squared Test; $p < 0.001$
Cramer's V 0.16



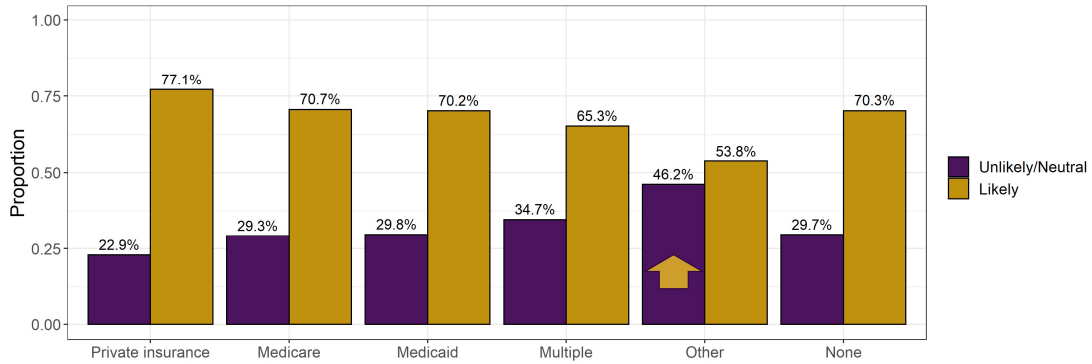
Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: LIKELIHOOD TO RECOMMEND PA BY HEALTH INSURANCE TYPE

Likelihood of recommending PA by insurance

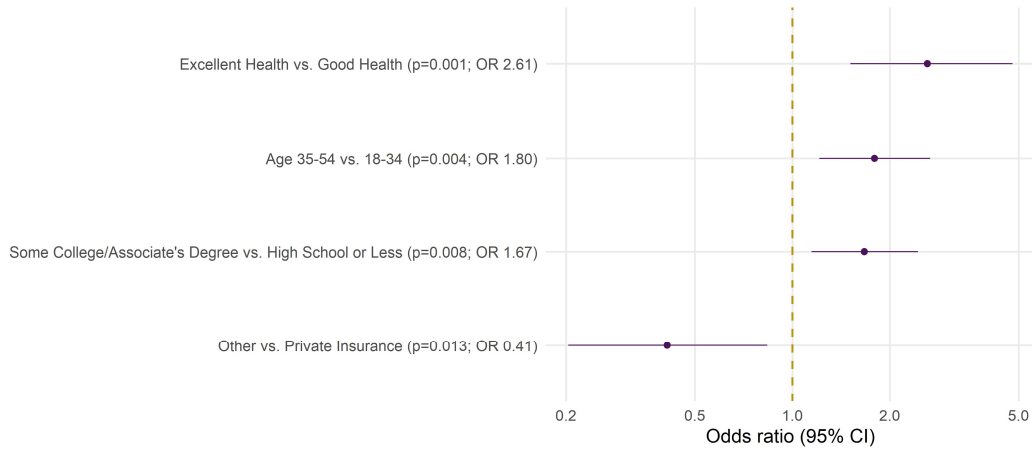
Pearson's Chi-Squared Test; p=0.017
Cramer's V 0.12



Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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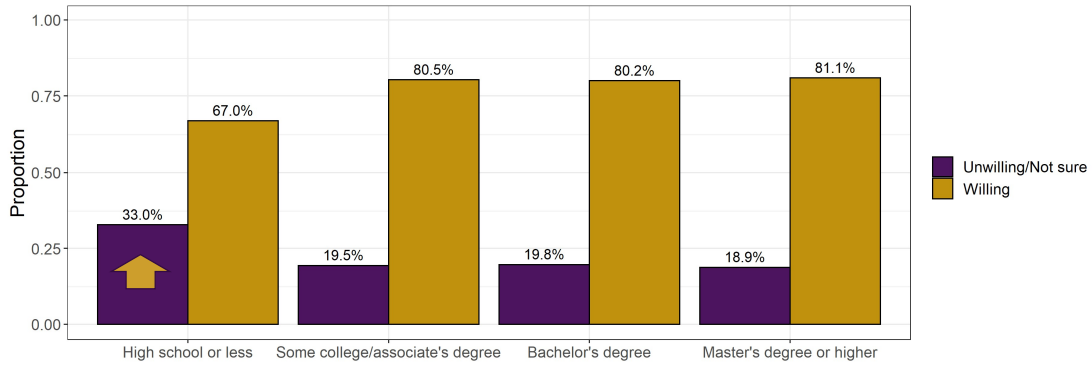
MULTIVARIATE RESULTS: LIKELIHOOD TO RECOMMEND PA LOGISTIC MODEL



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UNIVARIATE RESULTS: WILLING TO SEE PA FOR MEDICAL NEEDS BY EDUCATION

Willing to see a PA by education
Pearson's Chi-Squared Test; p=0.011
Cramer's V 0.15

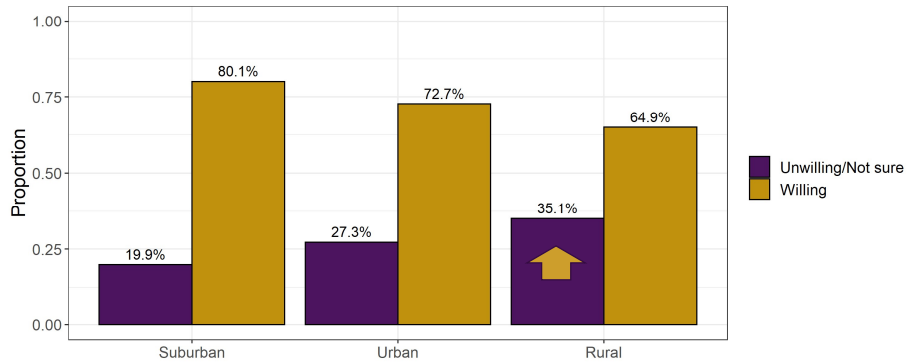


Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: WILLING TO SEE PA FOR MEDICAL NEEDS BY SETTING

Willing to see a PA by setting
Pearson's Chi-Squared Test; $p=0.009$
Cramer's V 0.14



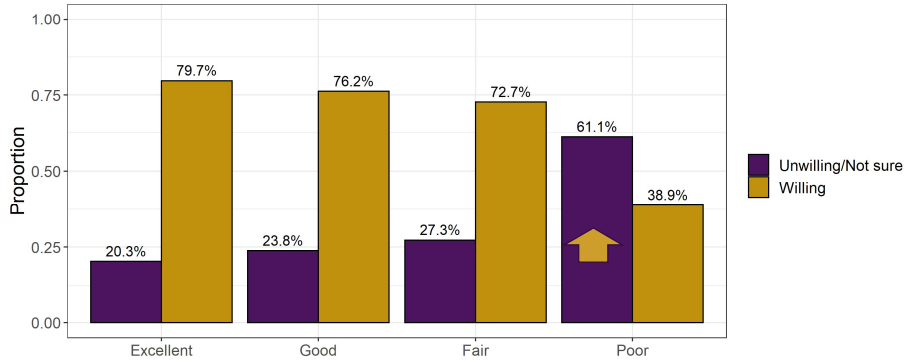
Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: WILLING TO SEE PA FOR MEDICAL NEEDS BY HEALTH

Willing to see a PA by health

Fisher's Exact Test; p=0.007
Cramer's V 0.17



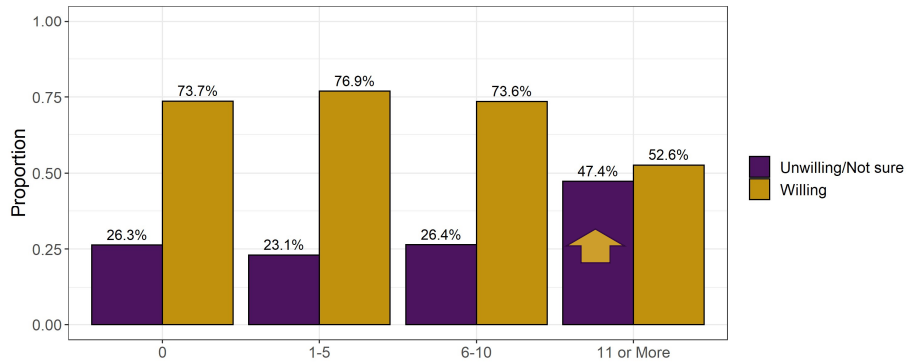
Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: WILLING TO SEE PA FOR MEDICAL NEEDS BY NUMBER OF PROVIDER VISITS IN THE PAST YEAR

Willing to see a PA by provider visits

Fisher's Exact Test; p=0.019
Cramer's V 0.15

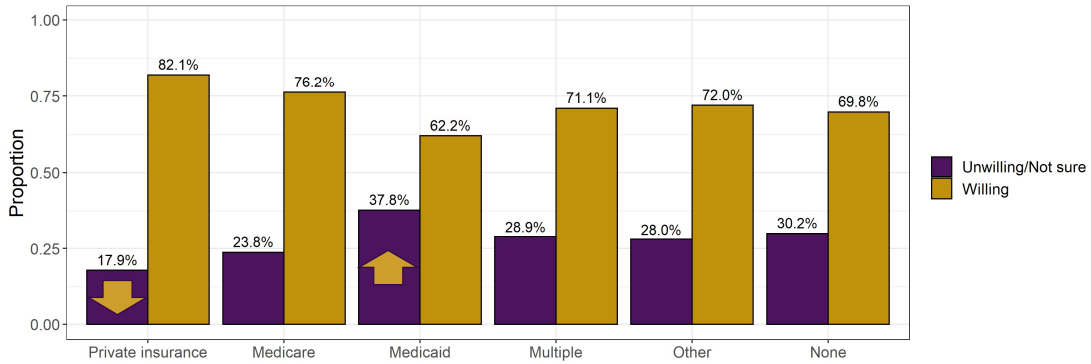


Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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UNIVARIATE RESULTS: WILLING TO SEE PA FOR MEDICAL NEEDS BY HEALTH INSURANCE TYPE

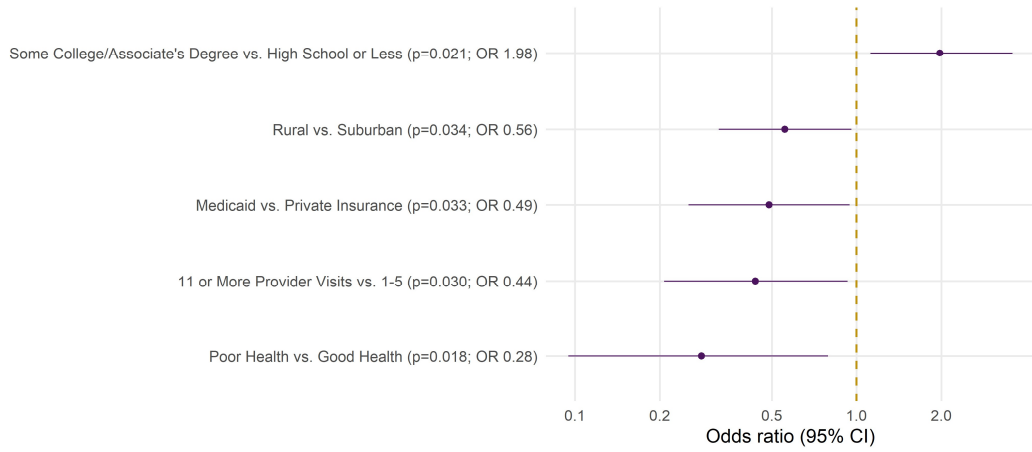
Willing to see a PA by insurance
Pearson's Chi-Square Test; $p=0.024$
Cramer's V 0.17



Note: Standardized residuals that are higher than 1.96 (upward arrow) or lower than -1.96 (downward arrow) indicate that the observed value in that group is much higher or lower than the expected value. These are the groups that are contributing the most to the significant Chi-Square result

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MULTIVARIATE RESULTS: WILLING TO SEE PA FOR MEDICAL NEEDS LOGISTIC MODEL

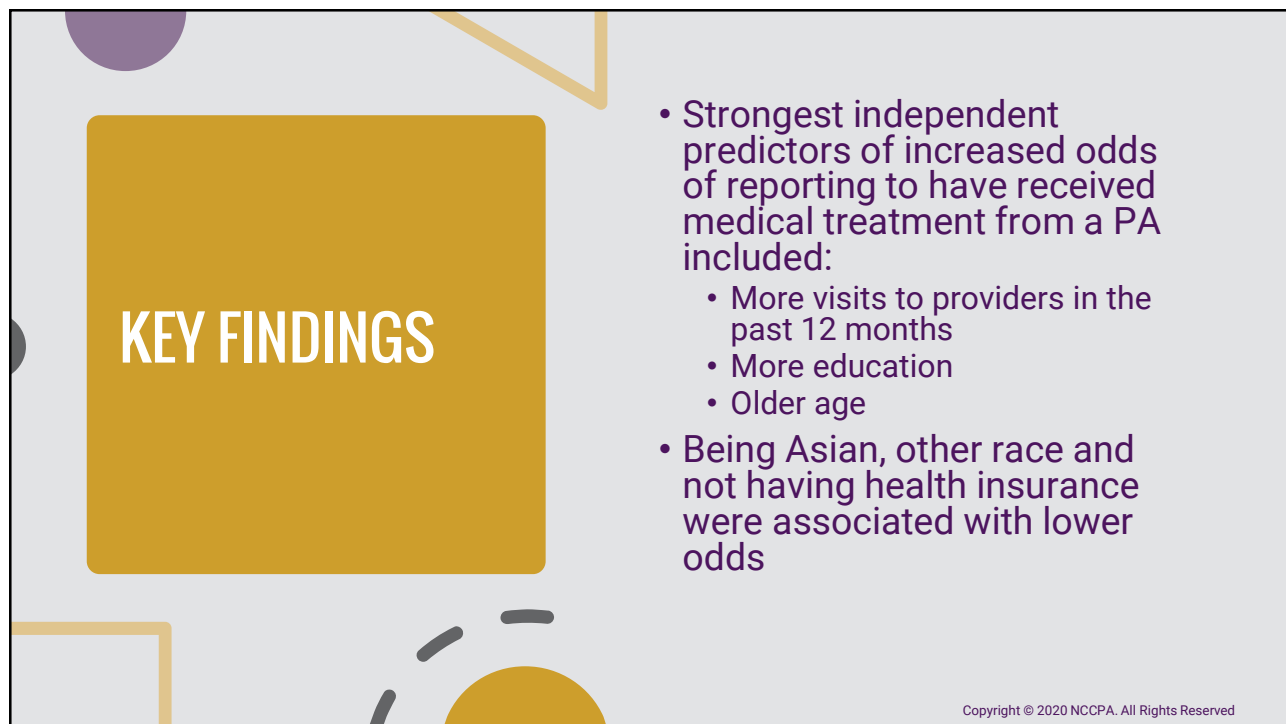


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LIMITATIONS

- **Generalizability**
 - Although quota sampling based on the demographic distribution of the US population was utilized, only random sampling can ensure true generalizability of the results
- **Self-report nature of surveys**
 - An attention check item was included on the survey, and participants who did not provide the correct response were excluded; however, social desirability and memory limitations/recall bias may have influenced the results

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The slide features a light gray background with decorative elements: a purple circle in the top left, a yellow triangle in the top right, a yellow square in the bottom left, and a yellow circle with a dashed line in the bottom center. A large yellow square on the left contains the text 'KEY FINDINGS'. To the right, there is a bulleted list of findings.

KEY FINDINGS

- Strongest independent predictors of increased odds of reporting to have received medical treatment from a PA included:
 - More visits to providers in the past 12 months
 - More education
 - Older age
- Being Asian, other race and not having health insurance were associated with lower odds

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KEY FINDINGS

- No significant differences based on all demographic and patient/consumer characteristics on satisfaction with care received from PAs
 - Satisfaction was high (86% to 96% reported very satisfied/satisfied)
- The only significant relationship between participant characteristics and likelihood to see a PA again for medical needs was education
 - Respondents with up to a high school degree were less likely to see PA again



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KEY FINDINGS

Strongest independent predictors of recommending PAs:

- Better health (excellent vs. good)
- Older age (35-54 vs. 18-34)
- More education (some college/associates degree vs. high school or less)

Respondents with other health insurance compared with private had lower odds of recommending

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The graphic features a dark blue background on the left with the text 'KEY FINDINGS' in white. A dashed white line curves from the top right towards the text. A solid dark blue circle is positioned below the text. On the right, a light gray background contains two rounded rectangular callout boxes. The top box is dark blue with white text, and the bottom box is teal with white text. A white bracket-like shape connects the two boxes to the left edge of the gray area.

KEY FINDINGS

More education (some college/associates degree vs. high school or less) was the only independent predictor of increased odds of being willing to see PAs for medical needs

Participants residing in rural areas compared to suburban, with Medicaid vs. private insurance, 11 or more provider visits vs. 1-5, and poor vs. good health had decreased odds

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CONCLUSIONS

- Consumer and patient perspectives regarding PAs are very favorable
- The majority of those treated by PAs are satisfied with the care received, are likely to see a PA again, and would recommend PAs to family and friends for their medical needs
- Consistent predictors of more favorable perspectives included older age and more education
- However, opportunities still exist to reach more patients as a third reported never being treated by PAs or were unsure and of these about a quarter were unwilling or needed to learn more about what PAs do
- Continuous assessment of patient satisfaction and willingness to be treated by PAs is important as the PA profession continues to grow



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Thank you!

For more information contact:
Andrzej Kozikowski, PhD; andrzejk@nccpa.net

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