

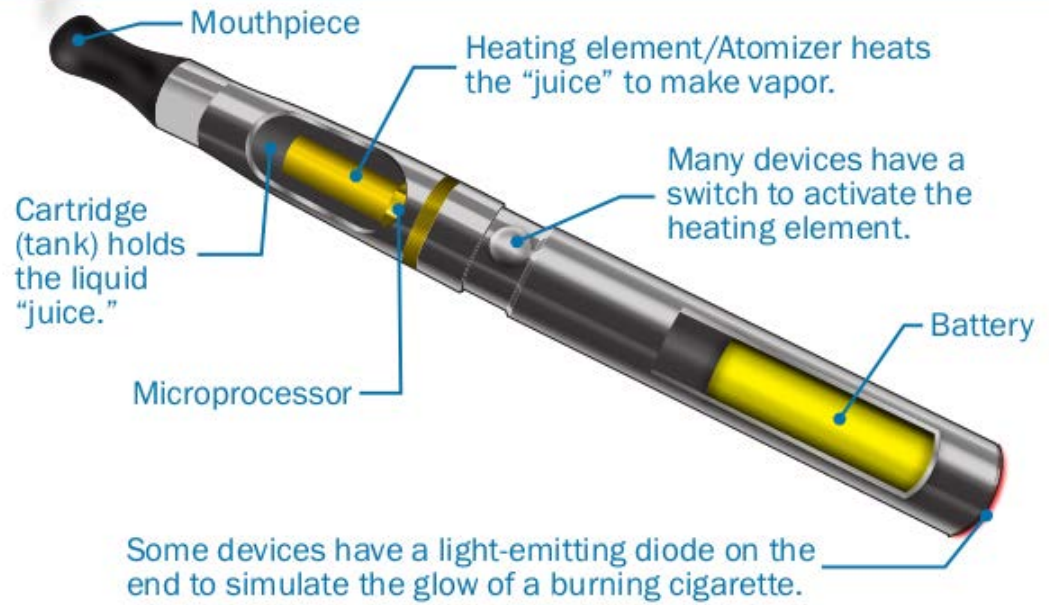
Survey of Primary Care Provider Views about Discussing Electronic Cigarettes with Patients

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Mechanism behind E-Cigarettes



Parts of an Electronic Cigarette



Societal Trends

Adolescents:

- Sold in flavors
- In 2015, 16% of high school and 5.3% of middle school students reported use (Tushar Sing 2016)
- From e-cigarette use, more likely to transition to combustible tobacco use (Brian A. Primack 2015)
- Considered as “gateway” to nicotine addiction

Adults:

- Report use of e-cigarettes as complete replacement for combustible cigarettes (Carla J. Berg 2014)
- Survey of > 10,000 adult smokers, who are motivated to quit, report that half tried e-cigarettes (Regan AK 2013)

Trends in Primary Care

- Findings from a survey administered to patients at OU Family Medicine:
 - Younger participants and those with less education more often reported e-cigarette use
 - Of the 28.4% who were current smokers, 74.5% had tried e-cigarettes
 - Of 22% who were former smokers, 36.8% reported e-cigarette use in their lifetime
 - 48.3% of patients were knowledgeable about the effects of e-cigarettes
 - 75.3 % of patients would want their PCP to discuss e-cigarettes with them during a clinic visit

Objective

Ascertained primary care providers' perspectives on:

- The harms/benefits of e-cigarettes.
- The use of e-cigarettes in smoking cessation.
- Preferred method of educating patients on e-cigarettes.
- Comfort level of discussing e-cigarettes with patients.
- Desire to learn more about e-cigarettes.

Methods

- Systematic, population-based sampling at OU Family Medicine
- Sample Size:
 - 18 Faculty Physicians
 - 36 Resident Physicians
 - 13 LPNs
 - 13 Medical Assistants (MA)
- 28 Item Paper Survey

Demographics of Responses

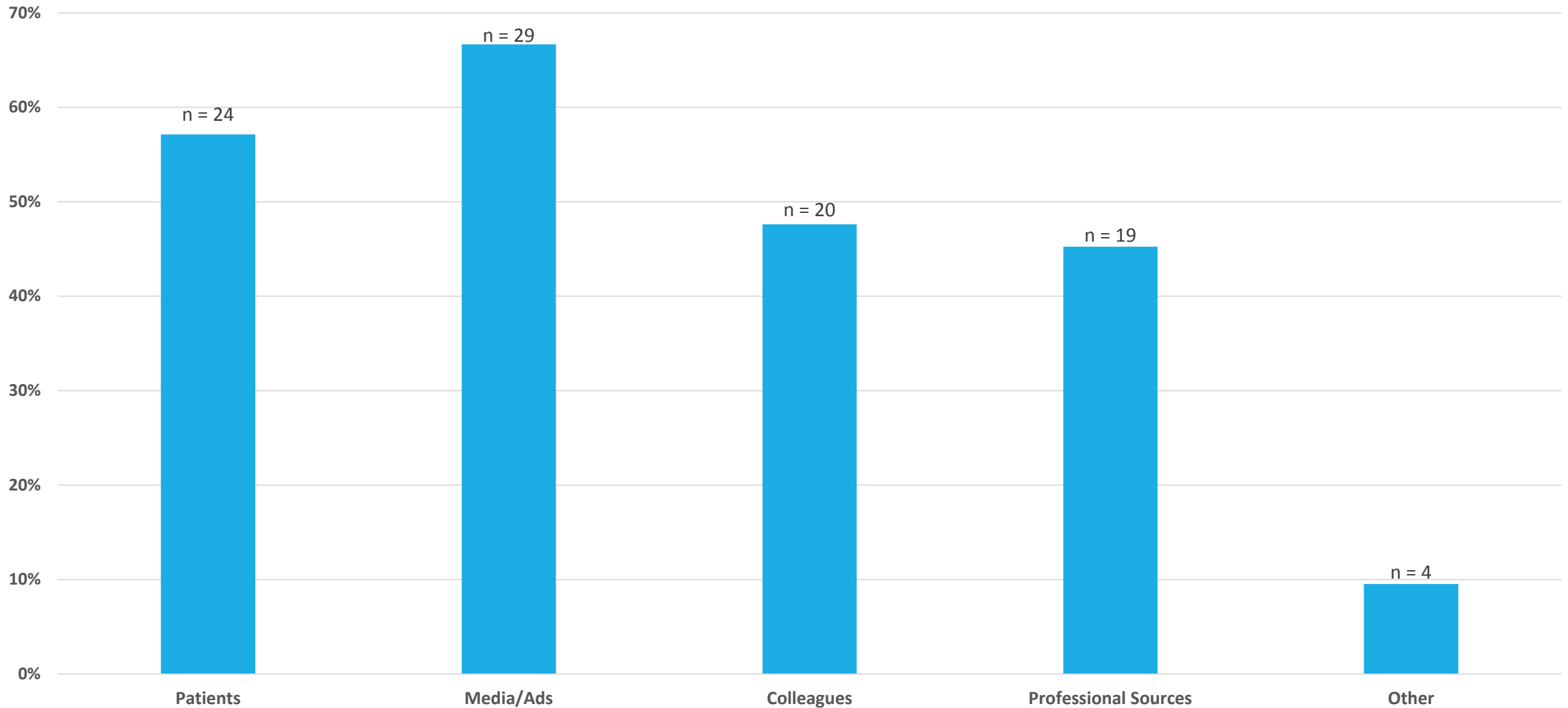
	% (n)
Age	
18 to 29	33% (14)
30 to 44	40% (17)
45 to 64	21% (9)
65+	7% (3)
Gender *3% missing	
Male	23% (10)
Female	74% (32)

	% (n)
Professional Role	
Resident Physician	30% (13)
Faculty Physician	21% (9)
Physician Assistant	0
Nurse Practitioner/APRN	0
Clinic Nurse (Rn, LPN)	21% (9)
Medical Assistant	28% (12)
<i>Total</i>	43

Previous Exposure to E-Cigarettes

	Yes	No
Q7: Have you heard about electronic cigarettes or vaping?	98%	2%
Q9: Do you think you have ever provided care to a patient who had used an e-cigarette?	95%	5%
Q10: Would you want to discuss electronic cigarettes with patients during their clinic visits?	74%	26%
Q11: Do you think clinic patients should be regularly screened for electronic cigarette use? <small>*3% no response</small>	88%	9%

Q8: Where have you obtained the information you have on electronic cigarettes/vaping?
(Not Mutually Exclusive)



The Harms/Benefits of E-Cigarettes

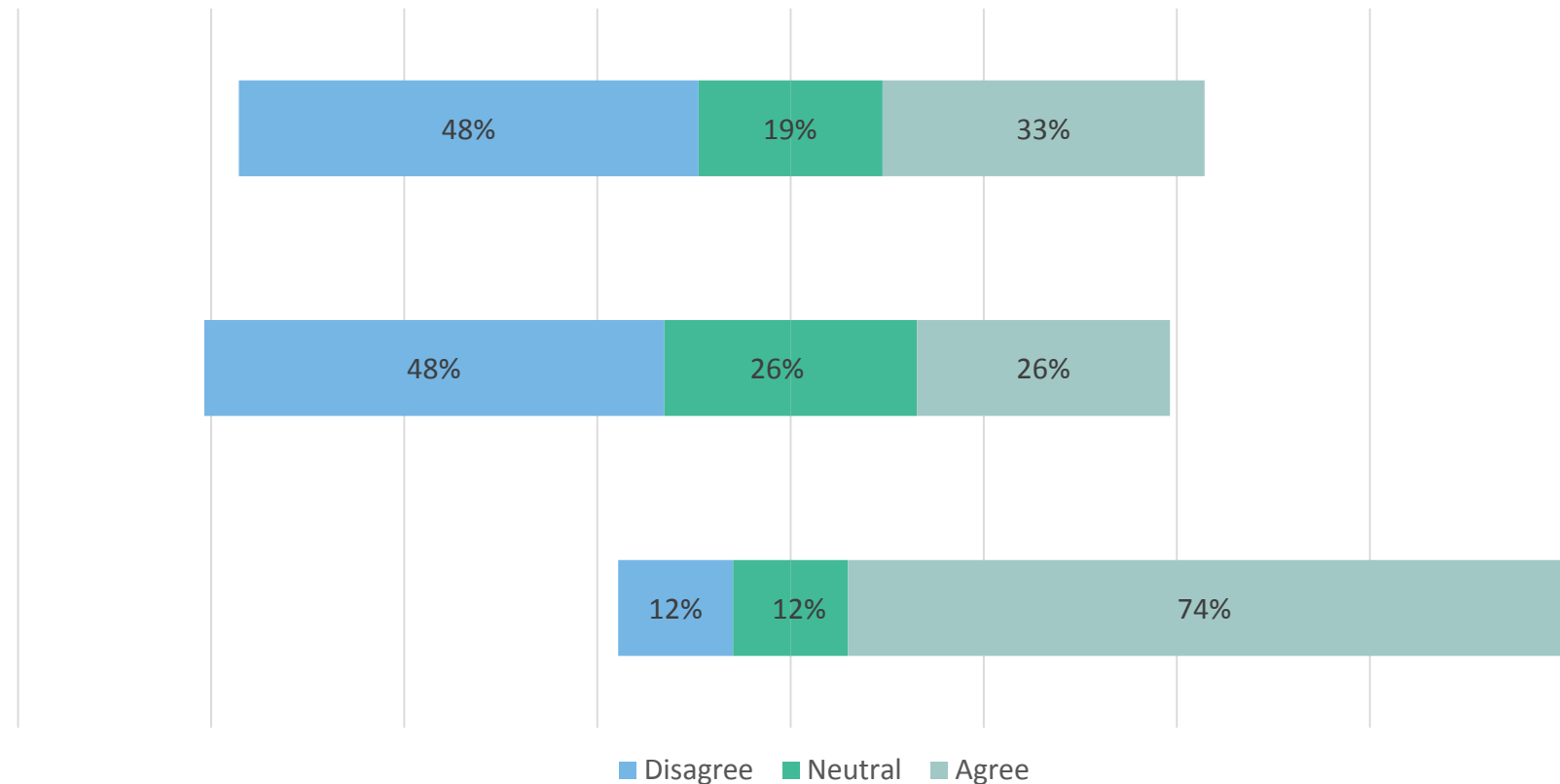
3 Tier Likert Data Breakdown

Q12: Electronic cigarettes are safer/less harmful than traditional cigarettes.

Q13: Electronic cigarettes are safer/less harmful than smokeless tobacco (chew, dip, snuff, etc.)

Q14: Electronic cigarettes contain some chemicals that may cause long-term health effects.

*2% no response



E-Cigarettes and Smoking Cessation

Q15: Electronic cigarettes could be a "gateway" to other tobacco use.

Q16: Electronic cigarettes encourage continuation among smokers who might otherwise quit.

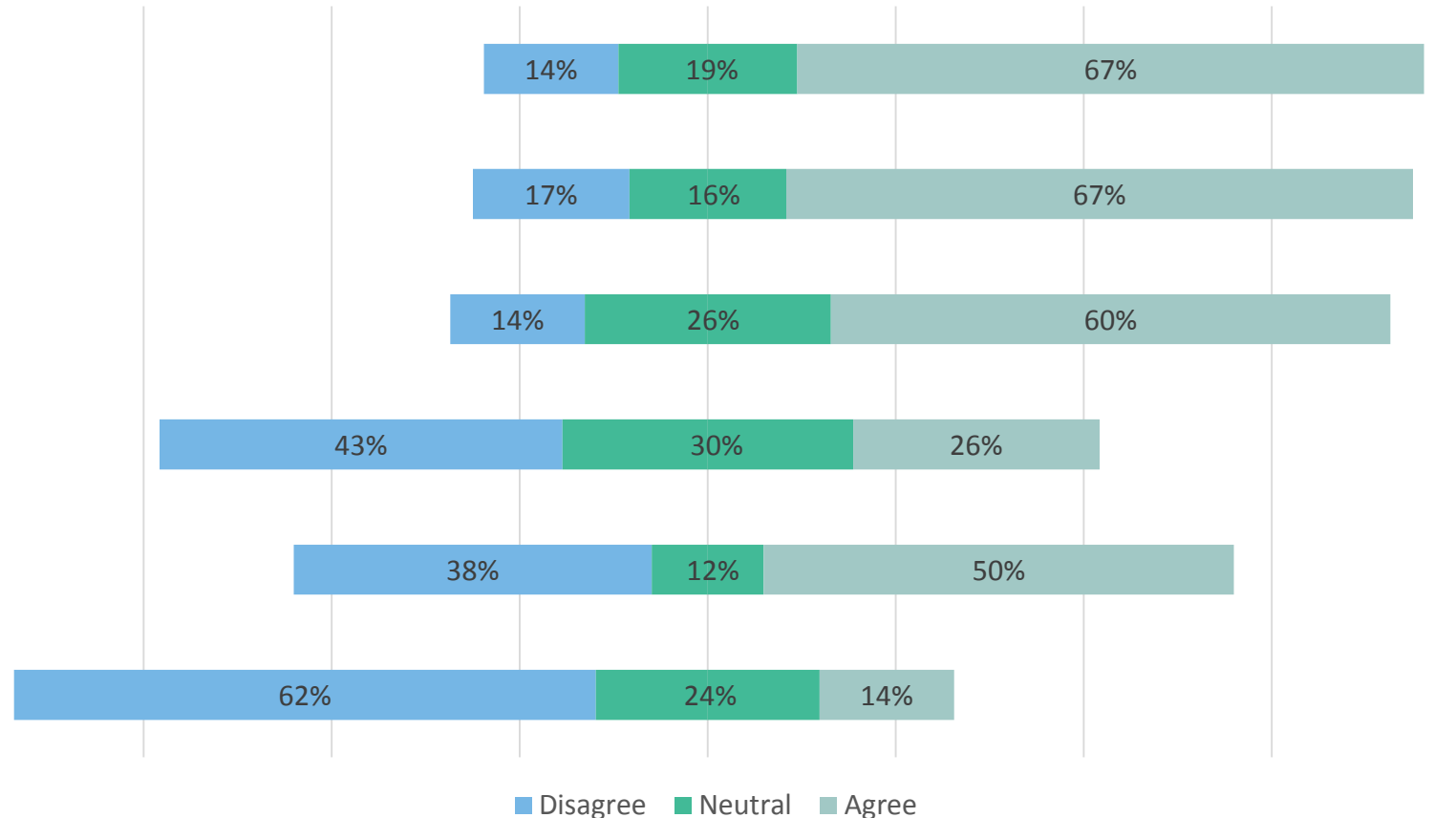
Q17: Electronic cigarettes counter the effectiveness of smoke-free policies.

Q18: Electronic cigarettes can lower cancer risk in patients who use them as an alternative to cigarettes.

Q19: Electronic cigarettes are helpful as a harm reduction strategy and/or cessation aid.

Q20: Electronic cigarettes are FDA approved as a cessation aid.

3 Tier Likert Data Breakdown



Educating Patients

3 Tier Likert Data Breakdown

Q21: My patients know about electronic cigarettes.

*4% no response

Q22: Discussing electronic cigarettes with patients may encourage them to use electronic cigarettes.

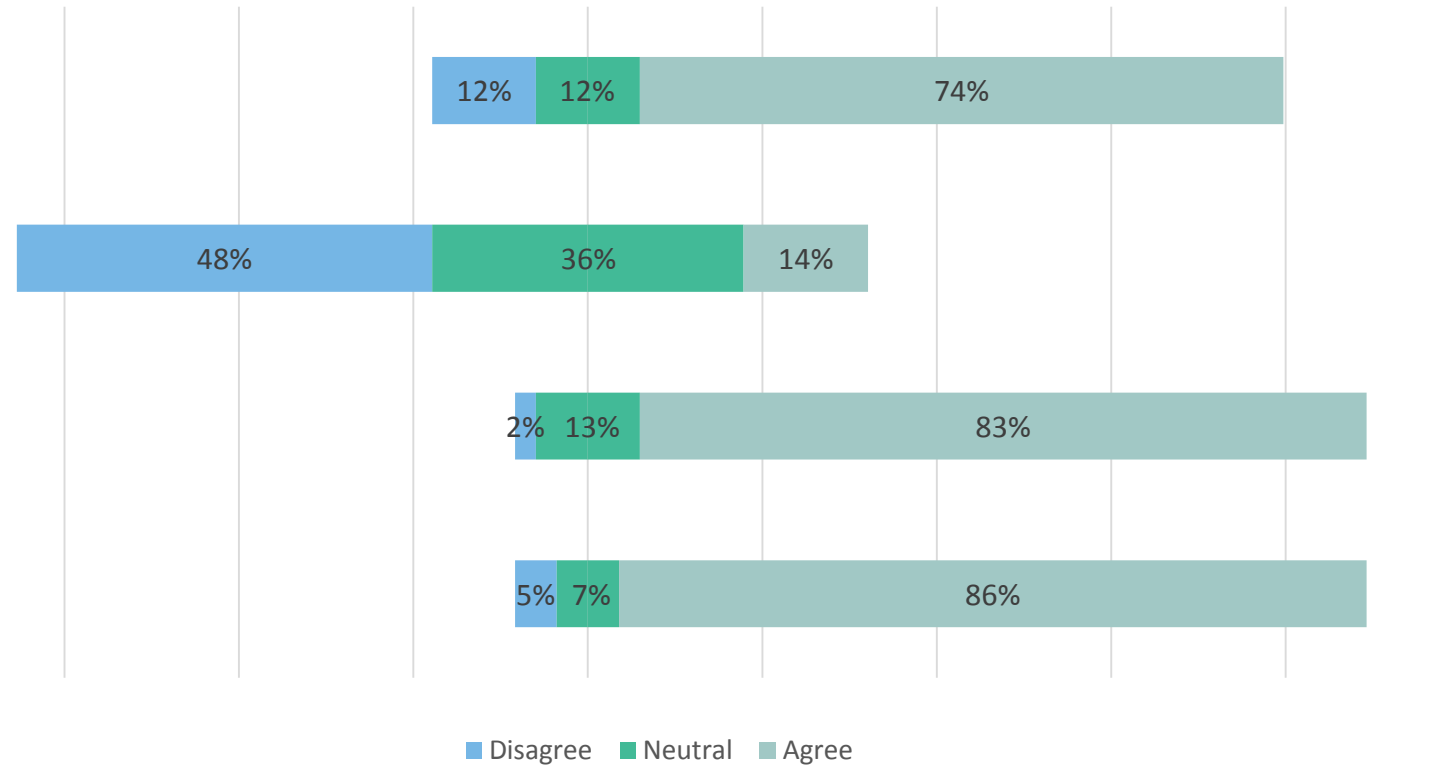
*2% no response

Q23: It is important to discuss electronic cigarettes with patients.

*2% no response

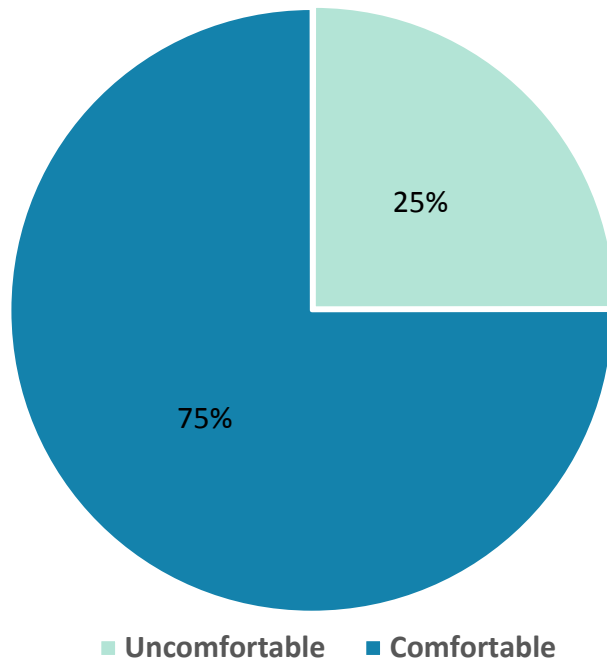
Q24: Parents of adolescents need to know about electronic cigarettes.

*2% no response

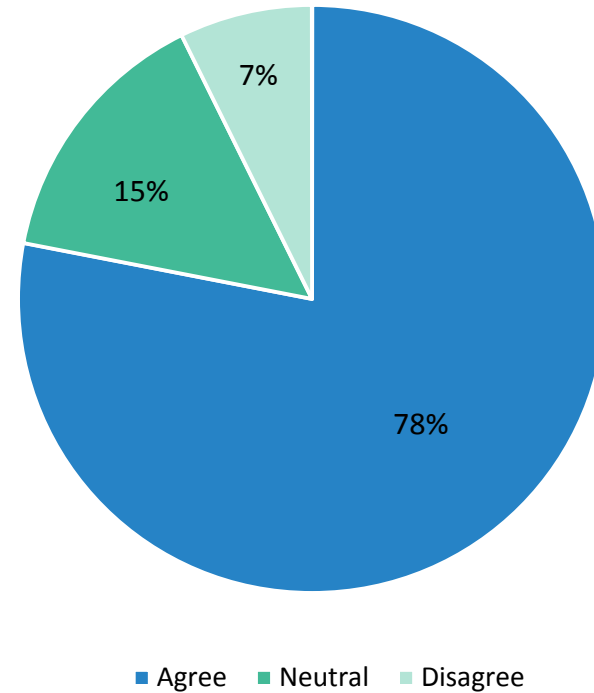


Comfort Levels

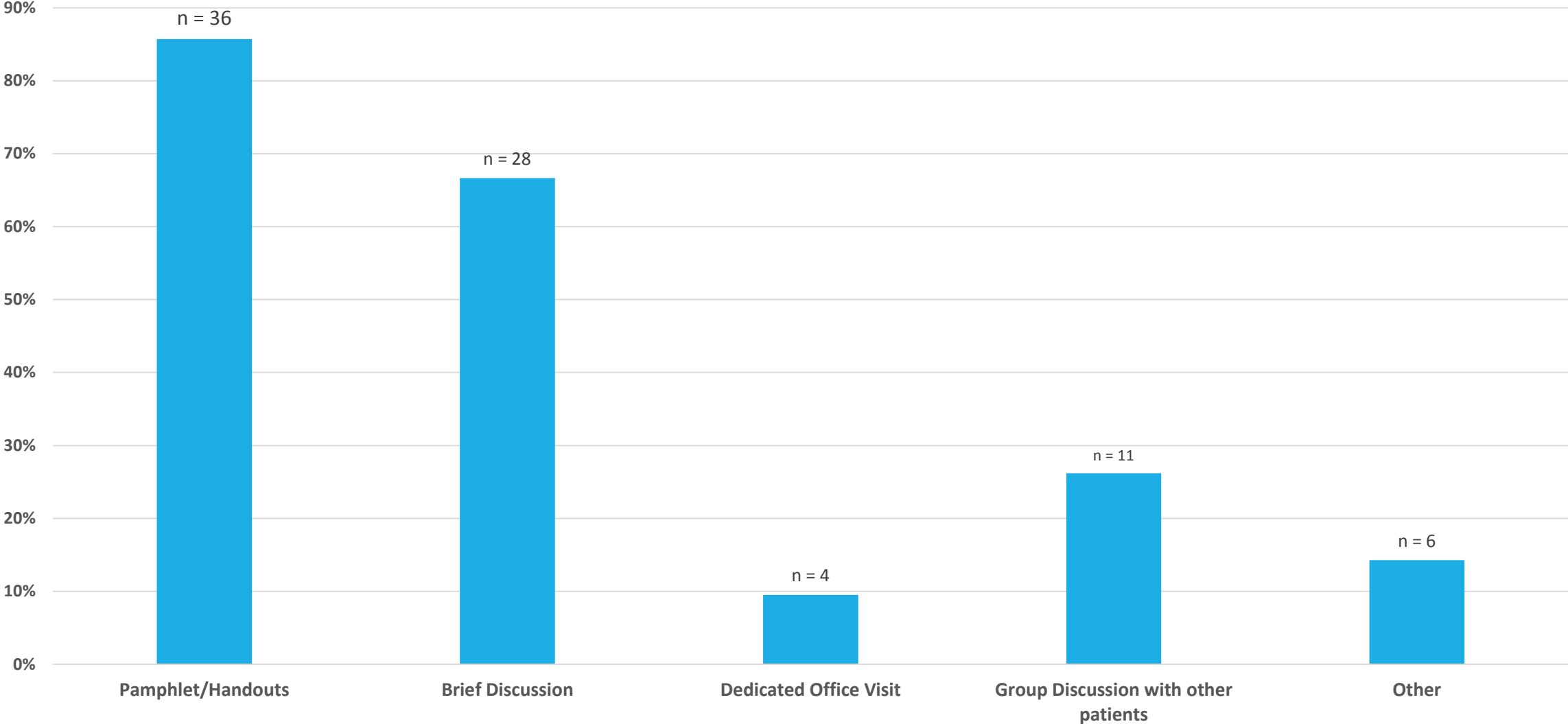
Q25: Please indicate your level of comfort talking with patients about electronic cigarettes.



Q26: I would like to learn more about electronic cigarettes.



Q27: How would you prefer to help your patients learn about electronic cigarettes?
(Not Mutually Exclusive)



Results Highlights

- 48% of providers disagree that e-cigarettes are safer than combustible cigarettes and smokeless tobacco
- 74% of providers think there are other chemicals in e-cigarettes that are harmful
- Majority of providers think that e-cigarettes counteract efforts to decrease smoking initiation
- Disputable if e-cigarettes help with smoking cessation
- Majority of providers believe that patients know about e-cigarettes and acknowledge the importance of discussing them with adult and adolescent populations

Conclusion

- 75% of providers express some comfort with regards to discussing e-cigarettes with their patients
- 78% of providers would like to learn more about e-cigarettes
- Providers prefer to educate patients using pamphlets or by having a brief discussion during visit
- Limitation: sample size is too small to yield significant statistical analysis

Future Work

- Expand the sample size
- Comparison between previous work on determining patient's view of e-cigarettes with providers

References

[1] U.S. Fire Administration. "Electronic Cigarette Fires and Explosions." *FEMA*. October 2016.

[2] Tushar Singh, M., PhD; René A. Arrazola, MPH; Catherine G. Corey, MSPH; Corinne G. Husten, MD; Linda J. Neff, PhD; David M. Homa, PhD; Brian A. King, PhD (2016). "Tobacco Use Among Middle and High School Students — United States, 2011–2015." MMWR - Morbidity & Mortality Weekly Report

[3] Brian A. Primack, M., PhD; Samir Soneji, PhD; Michael Stoolmiller, PhD; Michael J. Fine, MD, MSc; James D. Sargent, MD (2015). "Progression to Traditional Cigarette Smoking After Electronic Cigarette Use Among US Adolescents and Young Adults." JAMA Pediatrics 169(11).

[4] Carla J. Berg, Dana Boyd Barr, Erin Stratton, Cam Escoffery, Michelle Kegler (2014). "Attitudes toward E-Cigarettes, Reasons for Initiating E-Cigarette Use, and Changes in Smoking Behavior after Initiation: A Pilot Longitudinal Study of Regular Cigarette Smokers." Open J Prev Med 4(10).

[5] Regan AK, Promoff G, Dube SR, Arrazola R (2013). "Electronic nicotine delivery systems: adult use and awareness of the "e-cigarette" in the USA." Tob Control.

[6] Mark Doescher, MD, MSPH; Ming Wu, MD, PhD; Elizabeth Rainwater, MD; Ali Khan; Dorothy Rhoades, MD, MPH (2016). "Patient Perspectives on Discussion of Electronic Cigarettes in Primary Care."

Acknowledgements

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