

An Initiative to Improve Evidence-Based Nicotine Prescribing in the Primary Care Setting

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STUDY OBJECTIVES

- To provide primary care physicians with the evidence supporting the safety, efficacy, and tolerability of combination Nicotine Replacement Therapy (cNRT) for smoking cessation.
- To educate clinicians about the benefits and pitfalls of commonly used pharmacotherapies for smoking cessation.
- To measure changes in prescribing cNRT after a web-based training module in a large primary care group.

BACKGROUND

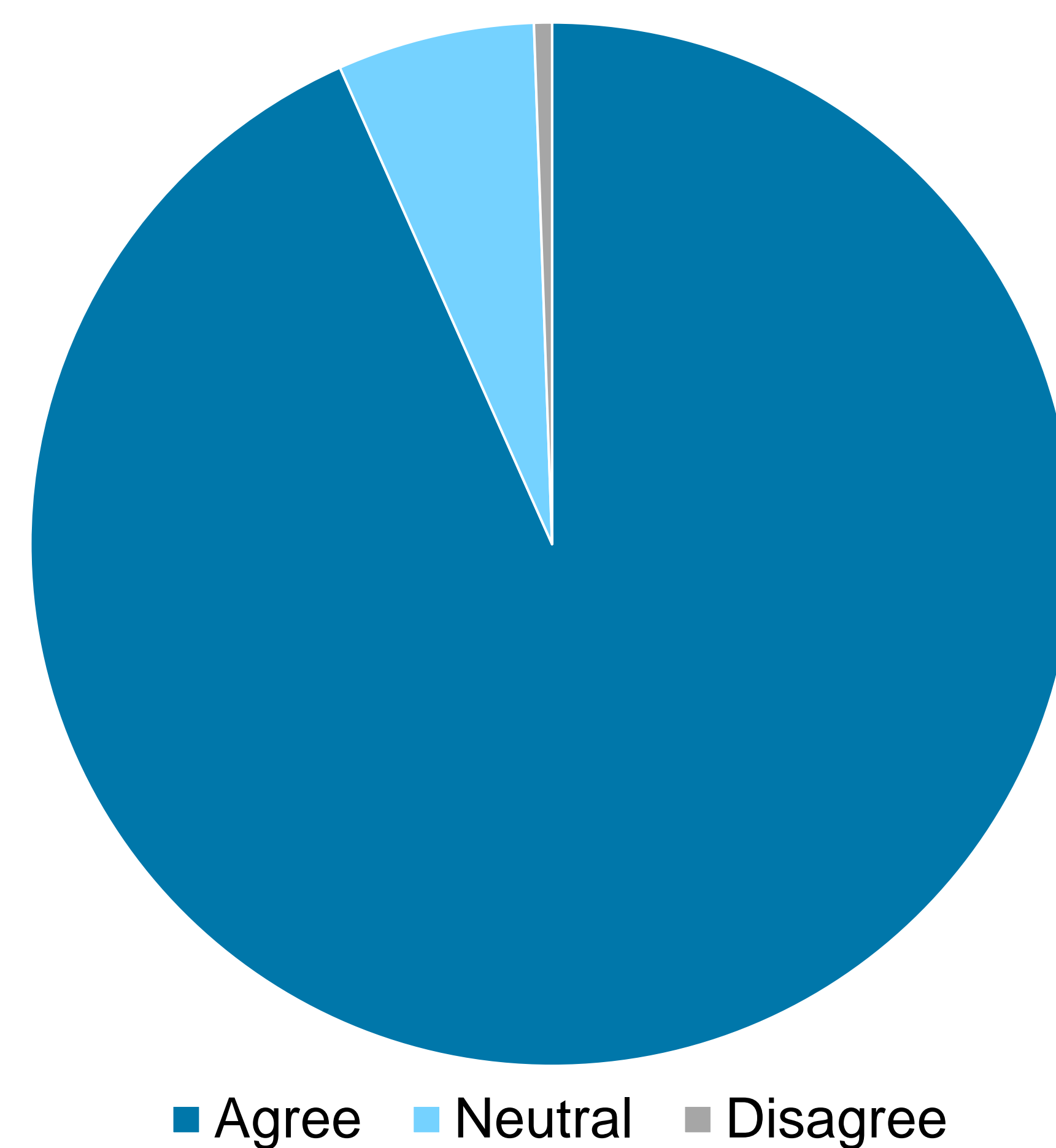
- While nearly 70% of tobacco smokers want to quit, many struggle to successfully quit.¹⁻²
- Patients prescribed cNRT are 25% more likely to quit smoking compared to patients prescribed NRT monotherapy (systematic review, n=11,356; RR 1.25, 95% CI 1.15 to 1.36).³
- cNRT improves tobacco cessation success compared to monotherapy but is often under-prescribed.³
- In 2021, baseline cNRT physician prescriber data from Kaiser Permanente San Diego demonstrated cNRT is prescribed LESS THAN 10% of the time.

STUDY DESIGN

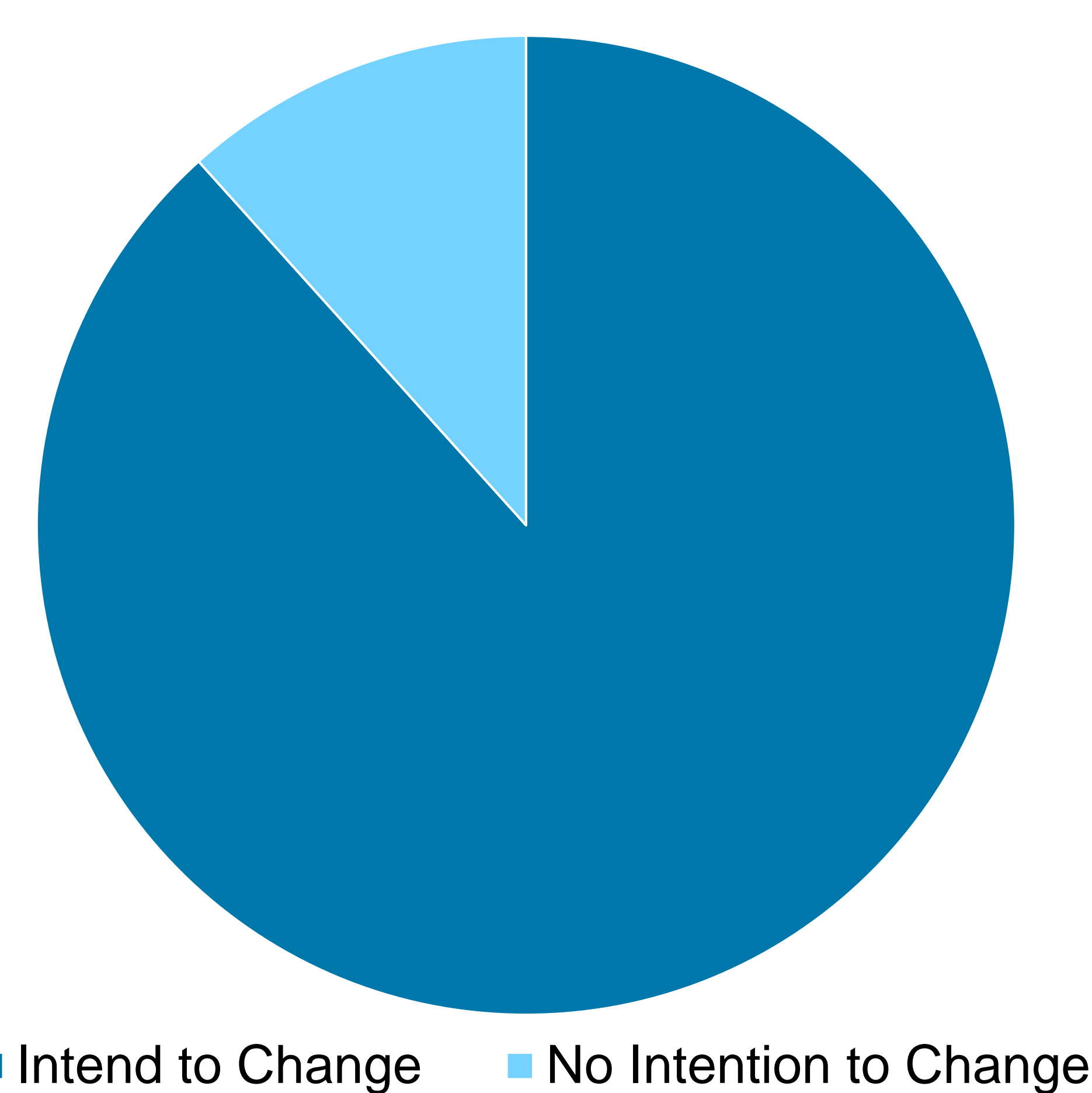
- Prospective Cohort Study
- Intervention: A 30-minute web-based training module on cNRT was offered to 202 primary care physicians in a large integrated health system in San Diego in September 2022.
- Primary care physicians completed a 7-item questionnaire post-training to assess baseline cNRT prescribing behaviors, attitudes, and intention to change prescribing behaviors.
- A follow up email was sent 6 weeks post-training to reinforce concepts and remind physicians to prescribe cNRT.
- Rates of cNRT prescriptions per month have been collected 6 months pre- and post-intervention from the EHR database, and analysis is in process.
- We defined cNRT prescriptions as a 1-month overlap of nicotine patch with either gum and/or lozenge, consistent with formulary restrictions and prior studies.

Post-training, 93% of physicians report increased confidence to prescribe cNRT, and 88% intend to increase nicotine prescribing.

Increased Confidence to Prescribe cNRT



Intention to Prescribe cNRT



RESULTS

- 89% (180/202) survey response rate of web-based training attendees.
- At baseline, only 28% of physician attendees reported **recommending** cNRT a majority of the time.
- At baseline, only 14% of physicians reported **prescribing** cNRT a majority of the time.
- A majority of attendees (57%) had no concerns about prescribing cNRT.
- 88% intend to change the way they prescribe NRT based on the training.
- 91% felt a more positive attitude toward prescribing cNRT. 9% were neutral. None felt less positively.
- 93% reported increased confidence to prescribe cNRT when clinically appropriate.
- Analysis of the cNRT prescriptions 6 months pre- and post-intervention is in process and expected March 2023.

KEY POINTS

- cNRT is an underutilized form of smoking cessation therapy, and this may reflect a gap in prescriber knowledge.³⁻⁵
- Brief education about cNRT appears to positively impact physician attitudes and prescribing behavior in the short-term.
- A web-based training module is a potential solution for reducing the care gap by educating clinicians about evidence-based nicotine prescribing.

LIMITATIONS

- Over-the-counter cNRT that was not prescribed might not have been captured. However, physicians at Kaiser Permanente San Diego are mostly aware NRT is a covered benefit, so effect size may be small.
- cNRT prescription rates do not necessarily correlate with change in smoking behavior.
- Future studies should exam short-term and long-term abstinence rates among patients.

REFERENCES

- Centers for Disease Control and Prevention. 2022. Fast Facts. [online] Available at: <https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm>.
- Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting Smoking Among Adults - United States, 2000-2015. MMWR Morb Mortal Wkly Rep. 2017;65(52):1457-1464.
- Lindson, N., Chepkin, S., Ye, W., Fanshawe, T., Bullen, C. and Hartmann-Boyce, J., 2019. Different doses, durations and modes of delivery of nicotine replacement therapy for smoking cessation. Cochrane Database of Systematic Reviews.
- Mooney, M., Leventhal, A. and Hatsukami, D., 2006. Attitudes and knowledge about nicotine and nicotine replacement therapy. Nicotine & Tobacco Research, 8(3), pp.435-446.
- Shah, S., Wilken, L., Winkler, S. and Lin, S., 2008. Systematic review and meta-analysis of combination therapy for smoking cessation. Journal of the American Pharmacists Association, 48(5), pp.659-664.

Take a picture to see survey questions and preliminary responses.

