

## Introduction

**Tobacco Use:** Cigarette smoking is responsible for more than 480,000 deaths per year alone in the United States.<sup>2</sup> Eight million deaths were caused by tobacco smoking globally in 2017.<sup>3,4</sup> Consequently, addressing tobacco use has become a global target as it is a major contributor to noncommunicable diseases, such as chronic obstructive pulmonary disease, lung cancer, and coronary artery disease.<sup>1,2</sup>

**Pharmacists Role in Smoking Cessation:** Smoking cessation (SC) is a proven approach to mitigate these risks and improve health outcomes. Community pharmacists play a crucial role in public health in implementing and providing smoking cessation services and leverage their influence and relationship with the community. Current guidelines in the United States recommend pharmacists to advise on the correct use of nicotine replacement therapy at point of sale and provide structured support to aid in smoking cessation.<sup>5,6</sup>

**Senate Bill 493:** Specific to California law, Senate Bill 493 (SB 493) allows pharmacists to provide nicotine replacement therapy (NRT) products without a physician's prescription to ensure timely access of NRT to patients in California.<sup>7</sup> Pharmacists trained to provide behavioral support for smoking cessation appear to be effective in supporting smoking cessation compared with either no support or lower intensity support.<sup>6</sup>

While community pharmacists are recognized as effective smoking cessation providers, it is not known how many pharmacies in California are offering smoking cessation services. This study aimed to evaluate the provision of smoking cessation services by pharmacists in community pharmacies within California. Examining the availability and accessibility of these services offered by community pharmacies is crucial for mitigating the public health consequences of tobacco use.

## Objectives

- To determine the availability/accessibility of smoking cessation services in California pharmacies by evaluating their availability in both urban and rural areas.
- To compare and describe smoking cessation services provided by various types of pharmacies such as chain pharmacies versus independent pharmacies in California in regards to cost, pharmacologic availabilities, appointment scheduling, and ease of navigation

## Materials and Methods

### Study Design

- Cross-sectional mystery shopper design
- Population: 141 pharmacies in California
- Data was collected between December 2023 and February 2024

### Data Collection

- A list of 141 pharmacies in California were obtained from two different online sources: the California State Board of Pharmacy and Quit-Smoking Pharmacies websites
- The exclusion criteria included pharmacies not open to the public and pharmacies that are no longer operating
- A script was developed which contained carefully crafted questions to inquire about the accessibility of smoking cessation services in California, thus aiming to gather valuable insights into the current landscape of smoking cessation support within the surveyed pharmacies

### Analysis

- Different parameters that were included:
  - Type of pharmacy (i.e. community chain, clinic, independent, grocery, and other)
  - Person who was spoken to (i.e. pharmacist, intern, technician, and clerk)
  - Access of smoking cessation services
  - Service available either through walk-in or by appointment
  - Cost of the service
  - Type of pharmaceuticals provided
  - Whether they referred or offered support services to quit smoking

## Results

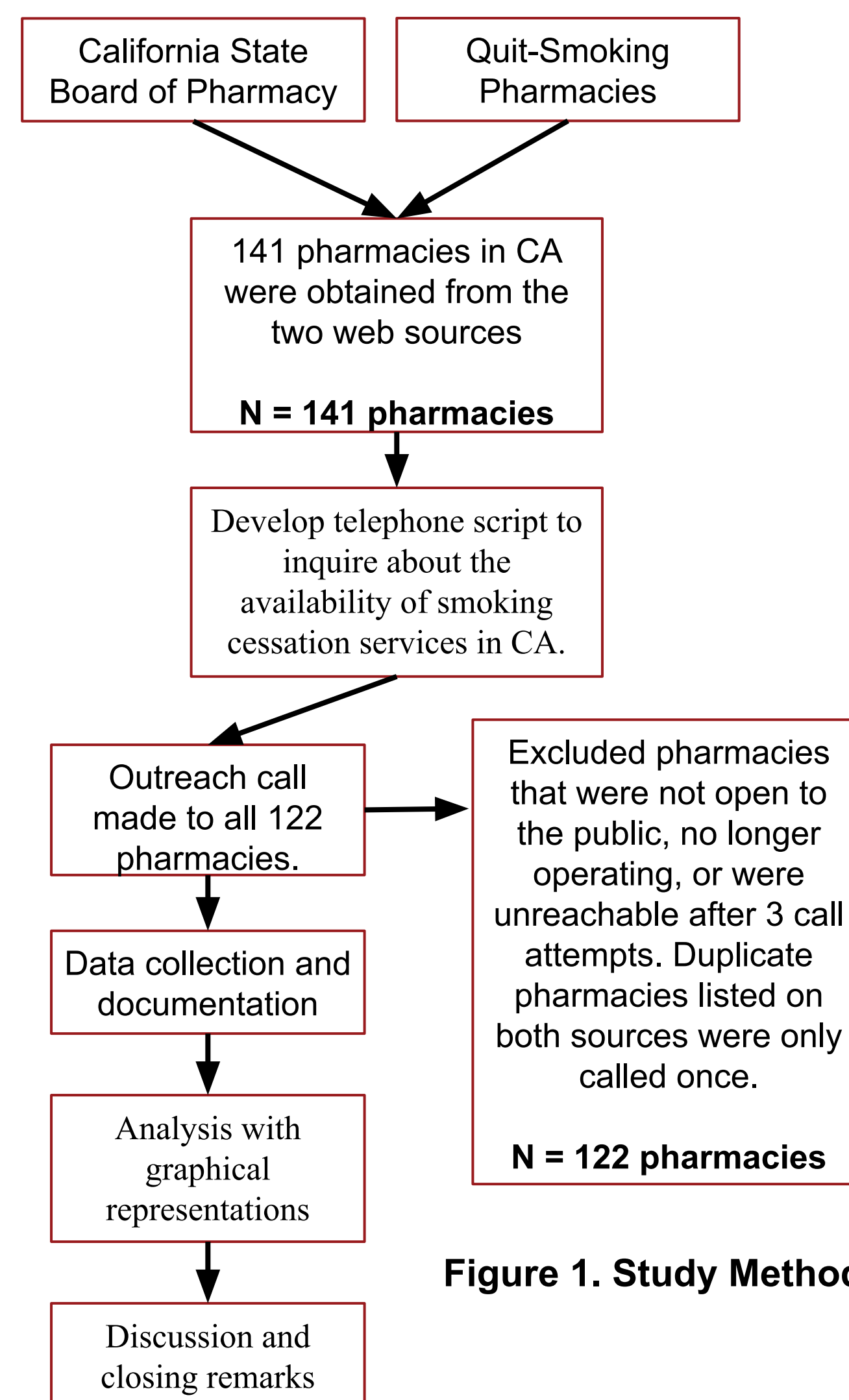


Figure 1. Study Methodologies

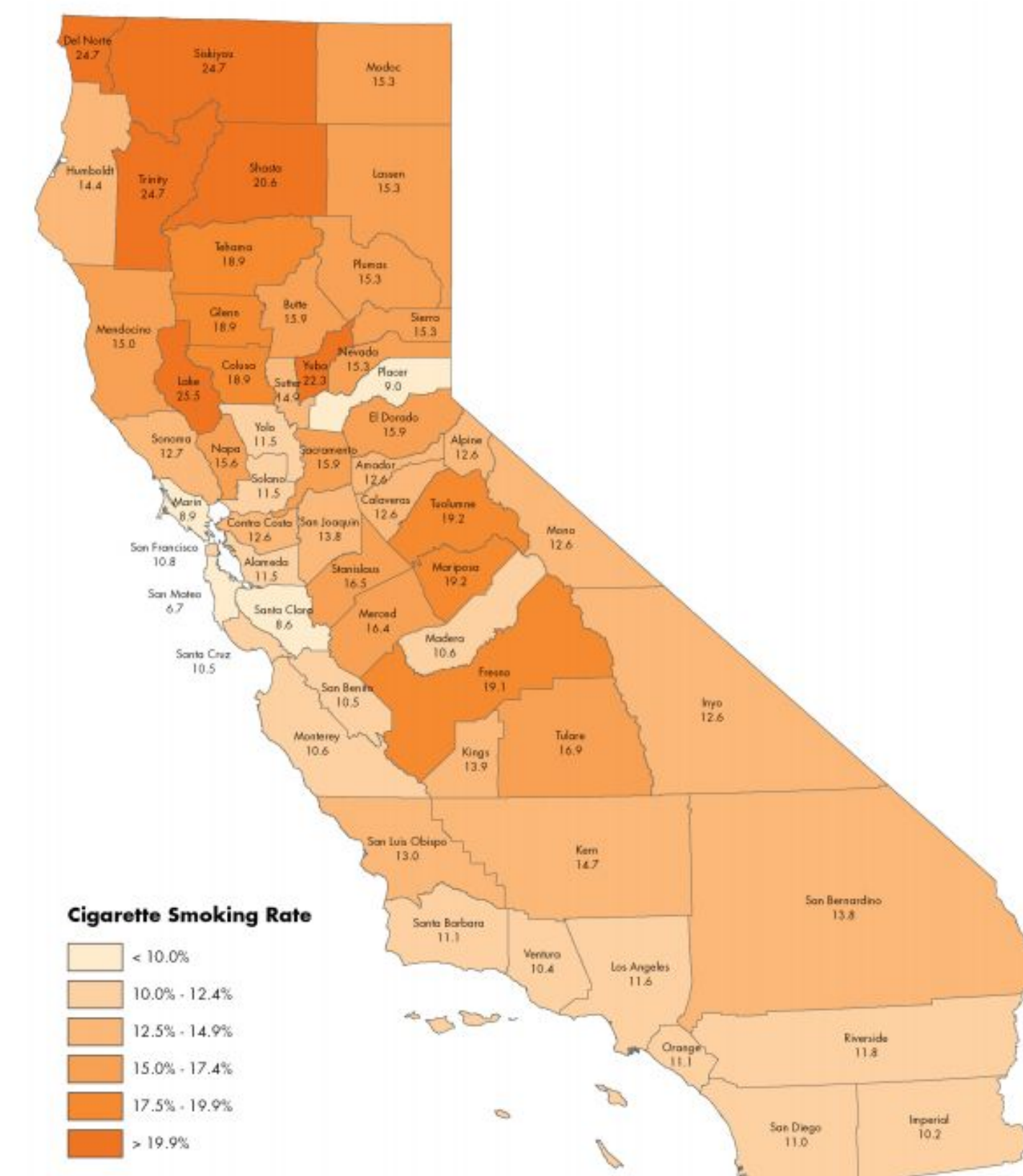


Figure 2. Cigarette Smoking Prevalence in California by County<sup>8</sup>



Figure 3. California Pharmacies: Smoking Cessation Services Map from Mystery Shopper Surveys

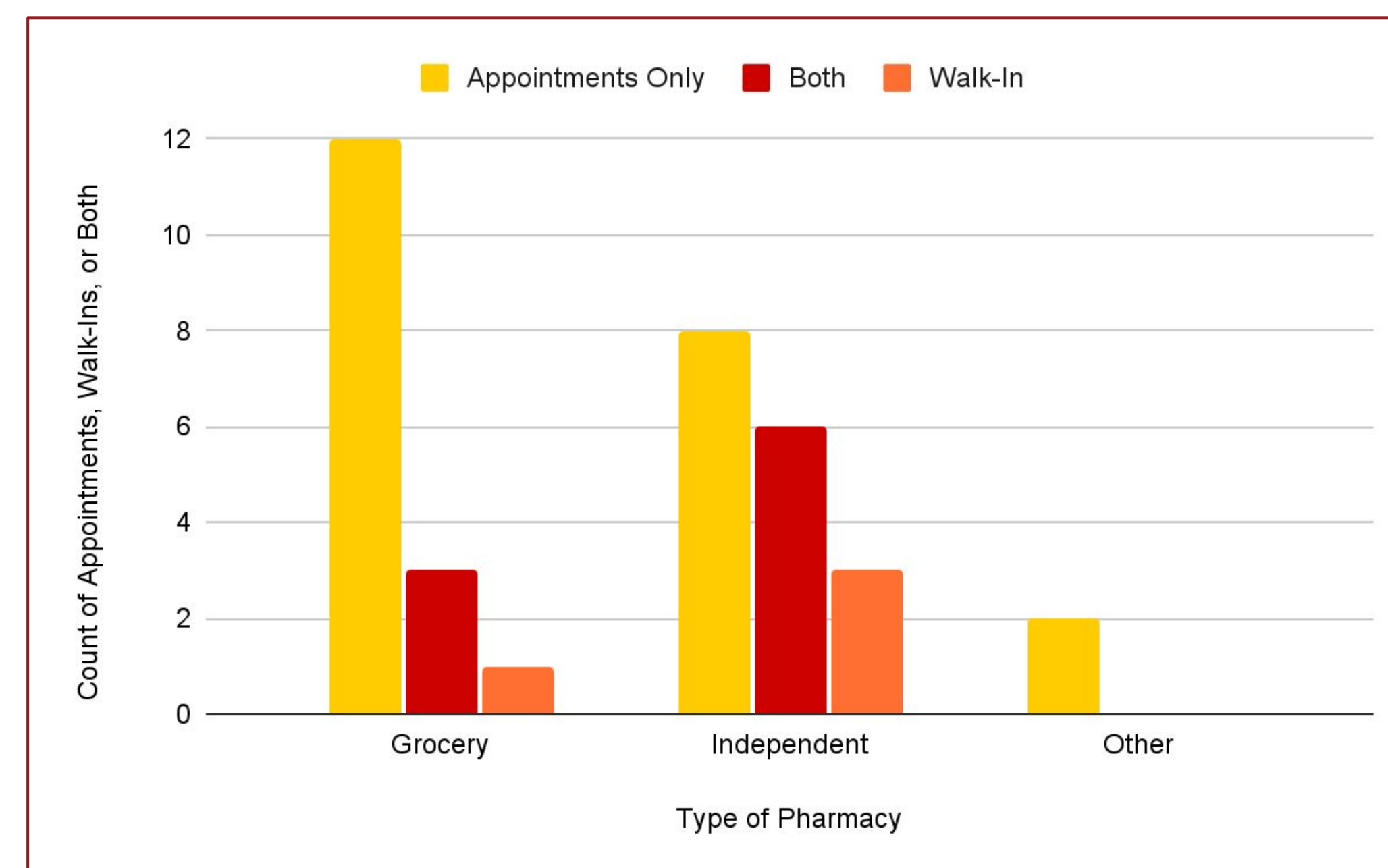


Figure 5. Type of Pharmacies and the Number of Appointments, Walk-ins, or Both Offered

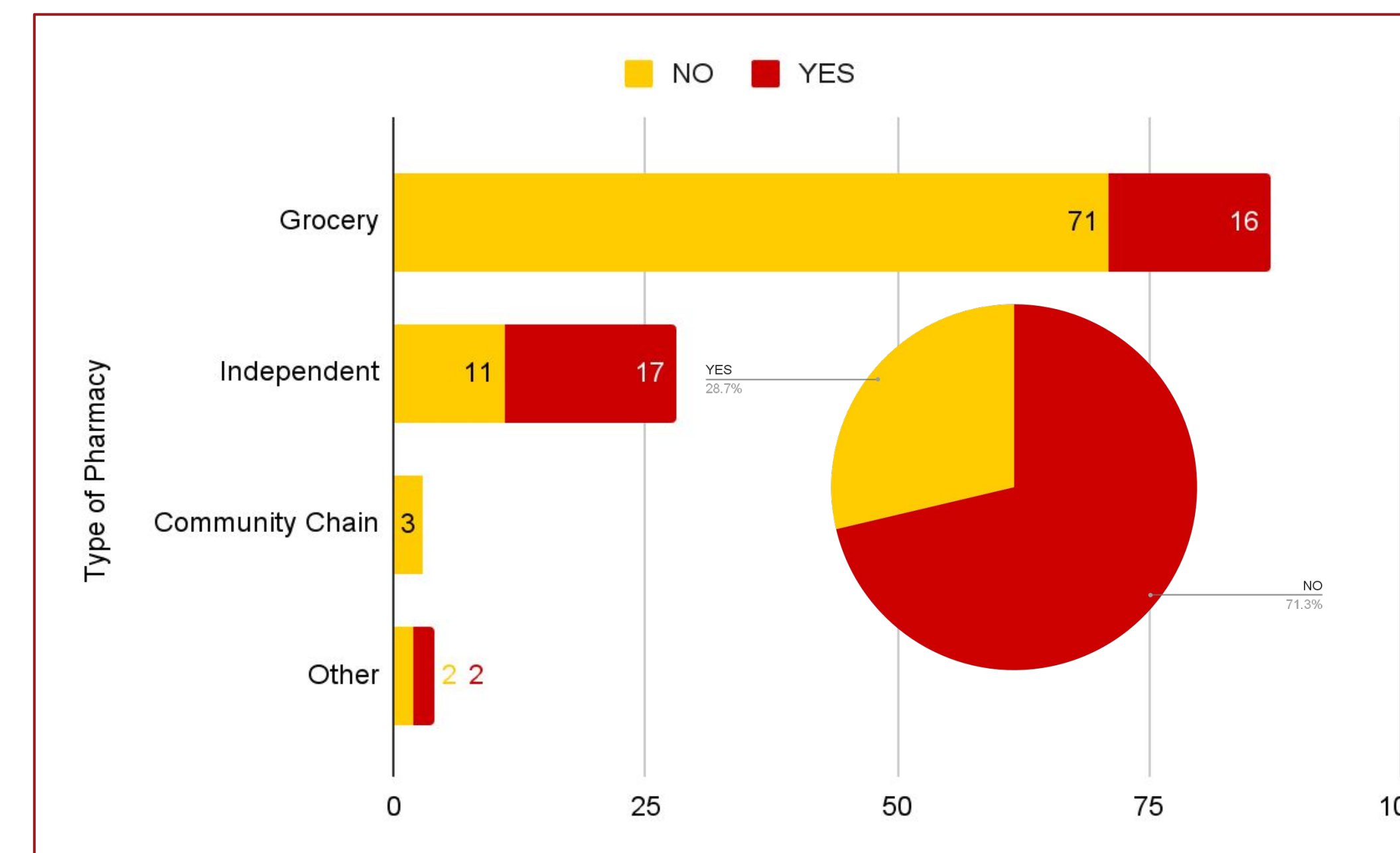


Figure 4. Breakdown of Availability of Smoking Cessation Services in Various Community Pharmacies in California.

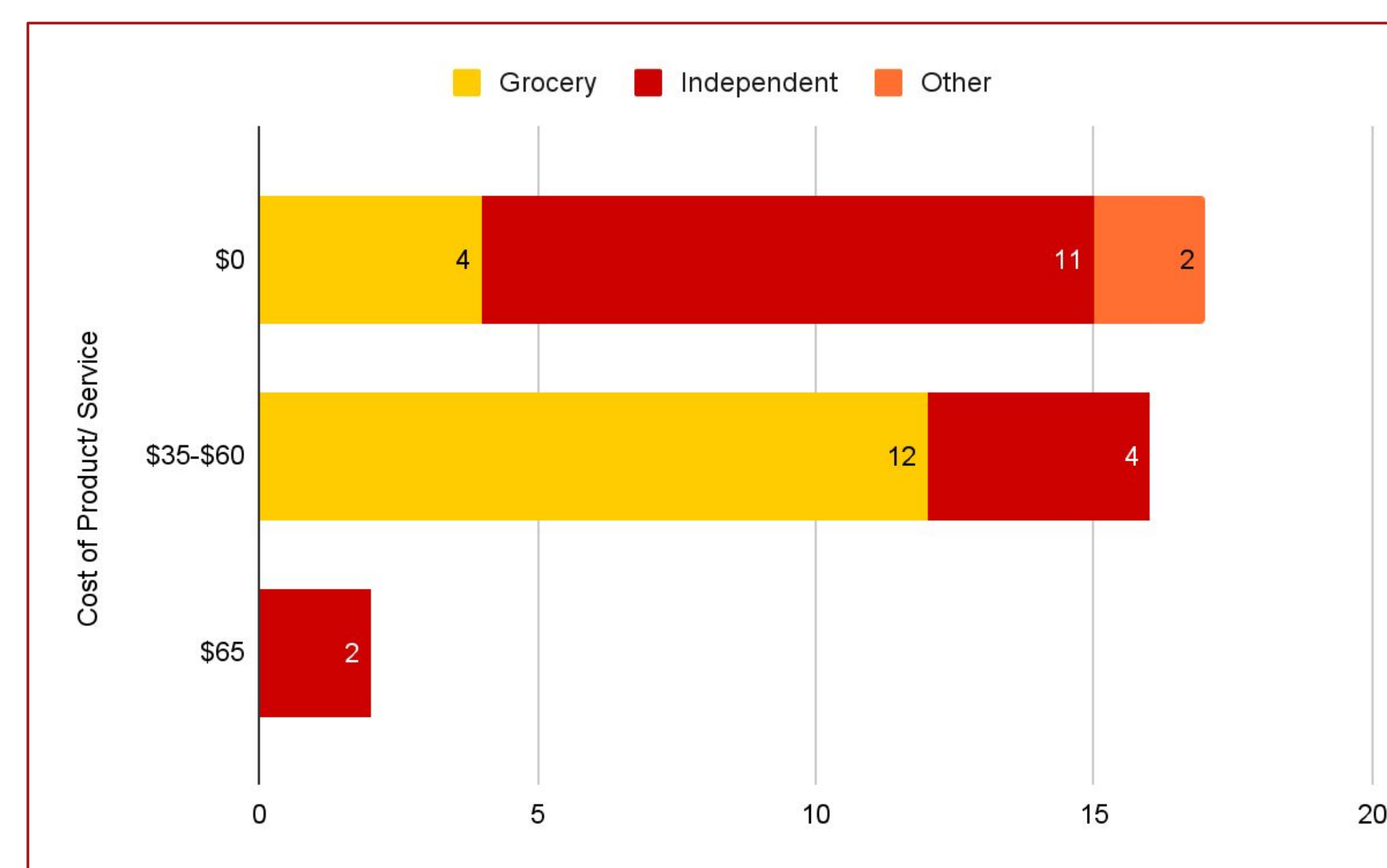


Figure 6. Cost Breakdown of Smoking Cessation Service vs Types of Pharmacies

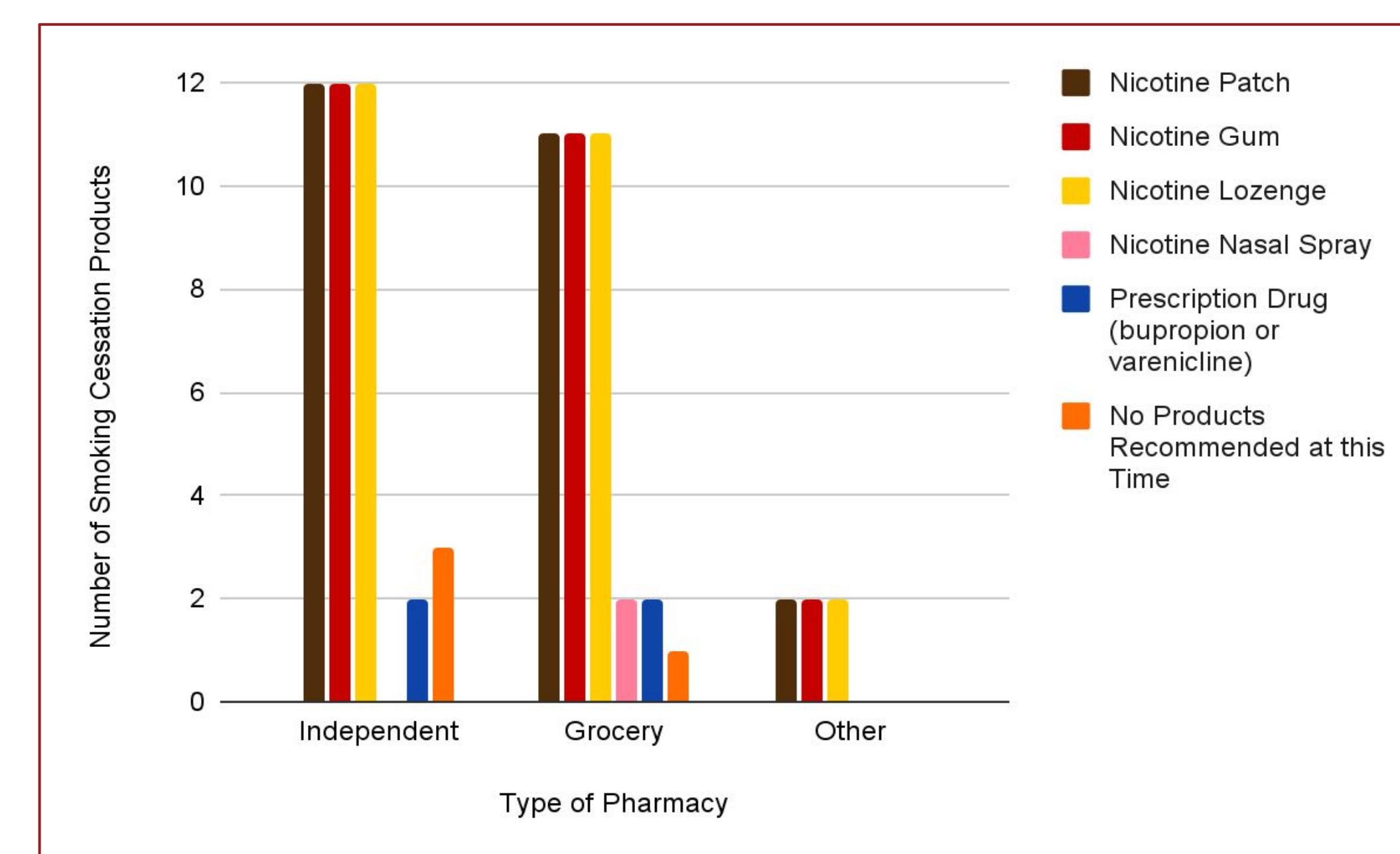


Figure 7. Type of Smoking Cessation Products offered from Various Types of Community Pharmacies

## Discussions

Out of the 141 community pharmacy outreaches, our successful outreach efforts covered 122 pharmacies across California. Some discrepancies arose from duplicated entries, changes in ownership, and instances where contact was unattainable after three phone call attempts. Among the 122 pharmacies, only 35 (29%) extended smoking cessation services. Among those offering these services, 16 (46%) belonged to grocery chains, 17 (49%) were independent, and 2 (6%) fell into other pharmacy categories. The majority (71%) of these pharmacies provided Nicotine Replacement Therapies (NRTs), while 2 (5.7%) offered nicotine nasal sprays, and 4 (11.4%) dispensed prescription drugs like bupropion or varenicline. Notably, 4 of the 35 stores (11.4%) refrained from recommending any products until a patient interview was conducted. Regarding operational protocols, a significant proportion (63%) of pharmacies required patients to schedule appointments for smoking cessation services. Geographically, the distribution of pharmacies offering these services across California did not exhibit a bias toward urban or rural areas; instead, there was an even distribution between those providing smoking cessation services and those that did not. In areas with higher prevalence of cigarette smoking, such as northern and central counties in CA, there were limited pharmacies offering smoking cessation services.

**Limitations:** Small sample of pharmacies offering service out of the 122 pharmacies we reached. Targeted pharmacies that were listed as offering SC service, so the number found should be an overestimation of the actual percentage of total community pharmacies. There was also a lack of chain community pharmacies on the list despite being the most common type of community pharmacy in California.

## Conclusion

- There is neither variance nor connection observed in the prevalence of tobacco and the availability of smoking cessation services across California. The geographic spread of pharmacies offering smoking cessation services does not display any partiality. However, counties with a larger population of smokers would undoubtedly see advantages from an increased number of pharmacies offering such services.
- Merely 35 out of the 122 pharmacies offered smoking cessation services. The projected percentage of CA pharmacies offering SC services would be even lower if every single pharmacy were contacted.
- Senate Bill 493 enables pharmacists in California to furnish NRTs without a physician's prescription, aiming to facilitate prompt access to NRT for patients. Despite this legislation, which aimed to broaden the scope of practice for pharmacists, the majority of pharmacies are not capitalizing on this opportunity.
- Further insight into successful models for sustaining SC services with revenue streams would be beneficial to ensure their long-term viability. Pharmacies stand to benefit greatly from adopting effective practice models or establishing dependable revenue streams to bolster the delivery of SC services, especially within busy environments with minimal ancillary staff support. Additionally, involving pharmacy technicians in providing SC support, such as obtaining patient history and inquiring about smoking habits, could enhance service delivery and efficiency.

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