

Appendix 1: Codebook for “Content Analysis of E-cigarette Products, Promotions, Prices and Claims on Internet Tobacco Vendor Websites, 2013-2014”

(The following is a succinct version of the codebook intended to provide definitions for each variable; the original codebook used for training and reference by coders includes extensive text and graphic examples)

Appendix Table 1. Codebook for Products sold by Internet Tobacco Vendors Selling E-Cigarettes	
Product (Variable)	Codebook Definition
Disposable e-cigarettes	Any e-cigarette intended to be used and disposed of rather than refilled with e-liquids or cartridges.
E-cigarette starter kit	A kit containing everything needed to start vaping with a refillable e-cigarette, including the vaping device, battery, charger, and e-liquid or refill cartridges.
Electronic cigars (e-cigars)	An e-cigarette specifically made to resemble a large cigar, must use the term cigar, e.g. e-cigar or electronic cigar.
Disposable e-cigars	A disposable e-cigarette specifically made to resemble a large cigar (and be disposed of rather than refilled), must use the term cigar, e.g. e-cigar or electronic cigar.
<i>Most popular retail store e-cigarette brands</i>	Whether IEVs sold the five most popular e-cigarette brands in retail stores at the time of data collection (Blu, Njoy, Mystic, 21 st Century Smoke, and Logic) were tracked in 2013. In 2014, Mystic and 21 st Century Smoke were dropped because they were not found at all at IEVs in our 2013 sample, and four other brands found to be the most popular in our study of Google Search Trends were added to our brand tracking in 2014 (Joyetech, Ego, Nucig, and V2).
<i>E-cigarette/e-liquid flavors</i>	We tracked whether IEVs sold e-cigarettes, e-liquids or e-cigarette refill cartridges that fell into any of the below categories of flavors:
Fruit	Any fruit flavor (e.g., cherry, blueberry, strawberry, coconut)
Candy	Any candy flavor (e.g. caramel, vanilla, chocolate, ice cream, mud pie)
Coffee	Any coffee flavor (e.g. coffee, espresso, latte, cappuccino)
Spice	Any flavors reminiscent of spices/seasonings (e.g. clove, cinnamon, nutmeg)
Alcohol	Any flavors reminiscent of alcoholic drinks (e.g. bourbon, rum, brandy, tequila, daiquiri, pina colada, beer)
<i>Non-e-cigarette products</i>	
<i>Cigarette products</i>	
Cigarettes	Selected if the site sells any tobacco cigarettes; this includes premium, generic, and value brands, as well as specialty and foreign brands (e.g. Marlboro, Kool, Salem, GPC, Doral, Camel, Winston, More, Capri, Nat Sherman, Players, Export A, and Dunhill). This category does not include cigars, loose tobacco, or tobacco paraphernalia (like rolling papers, pipes, etc.).
Flavored cigarettes	This variable is intended to capture flavored cigarette products banned under the U.S. FDA’s 2009 Family Smoking Prevention Tobacco Control Act. This includes: <ul style="list-style-type: none"> • Tobacco cigarettes with a flavor other than menthol (e.g. clove, strawberry, grape, cinnamon, vanilla, chocolate) • Flavored bidis • Flavored cigarette rolling papers (even if they don't have tobacco in them, they can be used to give hand-rolled cigarettes flavor) • Flavored loose "roll your own" tobacco intended for use with rolling papers/tubes This does not include: <ul style="list-style-type: none"> • Menthol cigarettes • Cigarettes (such as herbal cigarettes) that do not contain tobacco

Roll-your-own tobacco supplies	Products specifically marketed to be used in rolling one's own cigarettes - including rolling papers, cigarette tubes, cigarette rolling machines, cigarette tube stuffing machines, and loose tobacco labeled/promoted as for use in rolling cigarettes.
Herbal cigarettes	Any non-tobacco herbal cigarette; may be advertised as nicotine-free, tobacco-free, or "natural"). This includes flavored herbal cigarettes, including those labeled as non-tobacco/herbal clove cigarettes. Brand examples: Herbal Gold, Magic, and Ecstasy.
<i>Cigar products</i>	
Little cigars or cigarillos	This includes all small cigar products sized similarly to cigarettes (or a little larger), typically labeled as little cigars, filtered cigars, or cigarillos. Cigarillos and little cigars have differing legal definitions, but manufacturers and vendors often use the terms interchangeably, making consistent distinction between the two impractical, so they are included in one category of product.
Flavored little cigars or cigarillos	Includes any little cigar or cigarillo with a non-tobacco, non-menthol flavor, such as clove, strawberry, grape, cinnamon, vanilla, or chocolate
Large cigars	Site sells any standard "large" or standard sized cigars (hand or machine rolled, singles or multi-packs)
<i>Other products</i>	
Loose tobacco	Any form of loose tobacco. This includes both rolling tobacco and pipe tobacco, e.g. brands such as Drum, Bugler, Top, and Look Out.
Hookah or hookah supplies	Any products used for smoking hookah, including the hookah smoking apparatus (usually similar to a glass vase with tubes coming out of it), hookah/shisha tobacco, hookah charcoal, and/or tools used for handling and smoking hookah products.
Electronic hookah (e-hookah)	May look similar to a traditional hookah, or it may look like a larger electronic cigarette, but it will be specifically marketed as an electronic or "e" hookah and used to vaporize and inhale e-liquid. It may be referred to by other names such as "shisha stick."
Smokeless/plug/chew/snuff tobacco	Any smokeless tobacco, including plug tobacco, chewing tobacco, and/or snuff.
Snus	Small teabag-like packets of smokeless tobacco designed to be held in the mouth between the lip and gum, precluding the need for "spitting" as with other types of smokeless/chewing tobacco. Commonly sold by Camel and by Swedish brands such as Epok, Ettan, and Granit.
Alcohol	Any alcoholic beverages (including but not limited to beer, wine, liquor, and absinthe).

Appendix Table 2. Codebook for Product Pricing and Shipping Costs for Cheapest Products Sold by Internet E-cigarette Vendors: 2013 and 2014

Product (Variable)	Codebook Definition
E-cigarette starter kit	<p>Input the price for the vendor’s cheapest available e-cigarette starter kit (containing everything needed to start vaping with a refillable e-cigarette, including the vaping device, battery, charger, and e-liquid or refill cartridges).</p> <ul style="list-style-type: none"> • If the vendor does not sell e-cigarette starter kits at all, click the "vendor doesn't sell" link. • If the vendor advertises that they sell e-cigarette starter kits but the price isn’t available on the website (for instance due to an error on the site, being “sold out”, or if the user is instructed to contact the vendor for pricing information), then click the "price not available" link. • If the price is listed in a foreign currency, go to a currency converter (such as the one at http://www.xe.com/ucc) and convert the price to U.S. dollars. Record the original price (e.g. "E-cigarette starter kit original price: 25.00 Euros") and date of conversion in the comments field. • If there are conflicting prices on the website for the same product, for example, if the product description page says the e-cigarette starter kit is \$20, but when you add it to your shopping cart, it says it is \$22, record the \$22 shopping cart price, because that is what you would be charged if you actually made the purchase.
Disposable e-cigarette	<p>Input the price for the vendor’s cheapest available disposable/ non-refillable e-cigarette.</p> <ul style="list-style-type: none"> • If the vendor does not sell disposable e-cigarettes at all, click the "vendor doesn't sell" link. • If the vendor advertises that they sell disposable e-cigarettes but the price isn’t available on the website (for instance due to an error on the site, being “sold out”, or if the user is instructed to contact the vendor for pricing information), then click the "price not available" link. • If the price is listed in a foreign currency, go to a currency converter (such as the one at http://www.xe.com/ucc) and convert the price to U.S. dollars. Record the original price (e.g. "Disposable e-cigarette original price: 15.00 Euros") and date of conversion in the comments field. • If there are conflicting prices on the website for the same product, for example, if the product description page says the disposable e-cigarette is \$10, but when you add it to your shopping cart, it says it is \$12, record the \$12 shopping cart price, because that is what you would be charged if you actually made the purchase.
Shipping	<p>The shipping cost of one disposable e-cigarette (if available). If no disposable e-cigarettes are available, then capture the cost of shipping an e-cigarette starter kit. Track the cheapest shipping cost you could pay for getting a "smokable" e-cigarette delivered.</p>

Appendix Table 3. Codebook for Promotions Offered and Claims Made by Internet Tobacco Vendors Selling E-Cigarettes: 2013 and 2014

Promotion or Claim (Variable)	Codebook Definition
<i>Features health warning</i>	Website features any kind of health warning, including any of the official U.S. Surgeon General’s Warnings for cigarettes listed below (Copy and paste the text of the warning into the space provided): Official Surgeon General’s Warnings: 1. Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy. 2. Smoking by pregnant women may result in fetal injury, premature birth, and low birth weight. 3. Cigarette smoke contains carbon monoxide. 4. Quitting smoking now greatly reduces serious risks to your health.
<i>Vendor promotions</i>	Vendor features one or more promotions described below.
Vendor offers free shipping	Vendor offers free shipping at <i>any</i> purchase level (regardless of how much you have to buy to obtain free shipping).
Celebrity Endorsements	Vendor features actual or apparent endorsements from celebrities such as actors or recording artists; this may include advertisements, photos, or videos of celebrities using products (whether originally intended as endorsements or not); for example, video of an actress vaping an e-cigarette on a late-night talk show. Input the name of the celebrity in the space provided.
Branded vs. Unbranded celebrity endorsements	Celebrity endorsements were categorized as branded (displaying or advertising a specific brand) or unbranded.
Multiple TV news program endorsements	One vendor in 2013 was noted as displaying logos indicating apparent endorsements from multiple TV news programs.
Doctor/health professional endorsement	Vendor includes graphics or text implying (directly or not) that they or their products are endorsed by doctor(s) or health professional(s) (this can be an actual doctor mentioned by name, an image of someone wearing a medical uniform, text such as “4 out of 5 doctors say...”).
<i>Other promotions</i>	Coders were instructed to note details of any other or unusual promotions, such as buy one get one free or half off promotions.
Loyalty/referral program	Any kind of program or promotion where the customer accrues points or other means of redeeming credits or discounts to be used for future purchases by either buying products themselves or referring other customers to the vendor.
Discounts	Percent or dollars-off discounts on products.
Free tobacco products	Vendor offers free tobacco, cigarette, e-cigarette, or e-liquid products with purchase.
Incentives for engaging with social media	Vendor offers incentives (in the form of discounts, free products, or other) for engaging with them on social media (e.g. “liking” their page on Facebook, posting to their Facebook page, or mentioning them by the vendor’s Twitter handle on Twitter).
Free other items	Vendor offers free non-tobacco products with purchase, e.g. t-shirts, pens, magnets, lighters, and other promotional items.
Military discount	Vendor offers a discount to military members.
Links to social media sites	Vendor includes links (including image links) to one or more social media sites on their store website.
<i>Vendor claims comparing e-cigarettes to cigarettes</i>	Vendor features claims about e-cigarettes either in their marketing statements or in customer testimonials.
Any health-related claim	Vendor features <i>any</i> health-related claim about e-cigarettes.
Health advantages	Vendor features claims stating or implying that e-cigarettes are healthier than combustible cigarettes, for example, that the user is less likely to die of cancer, it alleviates stress, they have fewer toxicogenic substances, and/or are less addictive than cigarettes.

Price advantages	Vendor features claims stating or implying that using e-cigarettes vs. combustible cigarettes is cheaper and/or has cost advantages.
Smoke anywhere/circumvent smoke-free laws	Vendor features claims stating or implying that using e-cigarettes allows users to circumvent smoke-free laws and/or use the products anywhere or in places where smoking is not allowed.
Product <i>helps</i> to quit smoking	Vendor features claims stating or implying that using e-cigarettes helps people quit smoking or can be used as a smoking cessation device. The claim need not be an explicit statement against regular cigarettes; its claim may be implicit or simply a standalone statement touting their product.
Product <i>does not help</i> to quit smoking	Vendor features claims stating or implying that using e-cigarettes <i>does not</i> help people quit smoking or that they are <i>not</i> a smoking cessation device (these are often accompanied by conflicting claims or customer testimonials that read like carefully crafted marketing copy saying that e-cigarettes are an effective quit-smoking tool).
Safer for other people (than secondhand smoke)	Vendor features claims stating or implying that e-cigarette vapor is safer for other people around the user than secondhand cigarette smoke.
Modern/revolutionary	Vendor features claims stating or implying that e-cigarettes are modern or revolutionary. The claim need not be an explicit statement against regular cigarettes; its claim may be implicit or simply a standalone statement touting their product. For example: For example, the vendor may refer to e-cigarettes as “the future of smoking,” “a smoke-free revolution,” or “a modern alternative” to smoking.
Fire safety	<p>Vendor features claims that their e-cigarettes are fire safe such as:</p> <ul style="list-style-type: none"> • “fire safe without the chemicals” • “fire safe without the taste” • “fire safe” <p>Fire safety is a trait of how likely an unattended cigarette is to start a fire. A “fire safe” traditional cigarette has been specially engineered to go out quickly if it is not actively being smoked, but many smokers dislike the taste or texture of fire safe cigarettes. An e-cigarette that is not being smoked could be considered more fire safe than a traditional fire safe cigarette, because it doesn’t require combustion (although they have been known to explode).</p>
Social advantages	Vendor features explicit or implicit claims that there are social advantages to using e-cigarettes, such as being able to join smoking friends without smoking combustible cigarettes, or alternately, not having to leave your friends to go smoke, or simply in using and sharing a product used by other people consumers may interact with socially.