RECIPE

CRAFTING **INSIGHTS** 

# Actionable Analytic Recipes SM

Health Analytics Connect delivers specialized data analytics to aid employers in understanding the impact of vaping on health insurance and employee well-being. Our expertise in predictive modeling and trend analysis provides essential insights for strategic health management decisions.

The need for our services is underscored by the high costs associated with vaping. In 2018, healthcare expenses related to e-cigarette use reached \$15.1 billion, with \$1.3 billion from exclusive ecigarette users and \$13.8 billion from dual/poly users. This highlights the critical importance of addressing vaping in workplace health initiatives.

Our role is to equip employers with comprehensive data analysis, uncovering trends and behaviors related to vaping within their workforce. This understanding allows employers to make informed decisions about their health management strategies, including identifying the need for education and cessation support programs. While we focus solely on providing analytics, the insights we offer are instrumental in guiding employers to manage health risks effectively and control insurance costs in response to the challenges posed by vaping.

To learn more, contact us at contactus@healthanalyticsconnect.com





Unmasking the Vape Cloud: Navigating the Impact of Vaping on Employers, Health Insurance and Data **Analytics** 

## Why Employers Should Pay Attention

In the evolving terrain of employer-sponsored health plans, the ascent of vaping has become a focal point due to its intricate financial and health repercussions. Vaping, increasingly implicated in a host of serious health conditions such as lung injuries, cardiovascular disorders, and respiratory complications, poses significant risks. This troubling trend is mirrored in the escalating healthcare costs burdening employers, evident in the rising tide of medical claims and treatment expenditures for employees suffering from vaping-related ailments. Data from the 2015-2018 National Health Interview Surveys starkly illustrates this scenario, revealing an alarming \$15.1 billion in healthcare expenses linked to e-cigarette use, encompassing \$1.3 billion for exclusive e-cigarette users and a more significant \$13.8 billion for those combining e-cigarettes with other tobacco products.

The impact of vaping extends beyond the realm of direct medical costs, significantly impinging upon workplace productivity. Employees who vape are increasingly prone to health issues, leading to heightened absenteeism and diminished work efficiency. Without timely and effective intervention, these health problems can detrimentally affect the workforce's productivity and operational efficacy, amplifying the challenges confronting employers.

The vaping industry is marked by a rapidly shifting regulatory landscape, with new policies and legal challenges continually emerging. This dynamic environment necessitates that employers stay alert and well-informed to remain compliant with the evolving legal framework. Such changes carry profound implications for workplace policies and procedures, adaptability demanding continuous responsiveness.

Addressing the dual challenge of vaping, which encompasses both health risks and financial implications, is now a critical agenda for employer health plans. The considerable healthcare costs, as

highlighted by the \$15.1 billion expenditure in 2018, underscore the significant economic impact of vaping-related health issues. Employers are thus compelled to proactively tackle these challenges, keeping pace with regulatory changes, and adapting workplace policies to effectively manage the health legal aspects of vaping within their organizations.

In recent years, the surge in vaping's popularity, initially touted as a smoke-free alternative to traditional tobacco, significantly altered has public health and impacted perceptions employer-provided health insurance plans. Its appeal, particularly among younger demographics, fueled by innovative technology and diverse flavors. However, the growing popularity of vaping has also raised concerns over its safety, potential for nicotine addiction, and respiratory health impacts, leading to increased regulatory scrutiny and public health initiatives. The EVALI outbreak in 2019 marked a turning point, intensifying concerns and triggering stricter regulations, thereby heightening awareness of the associated risks.

Currently, the vaping landscape stands at a juncture, characterized by product diversification and ongoing debates over its role in harm reduction and smoking cessation strategies. Continuous research into the long-term health effects of vaping is shaping public health policies and practices within the insurance industry.

#### The Financial and Health Implications of Vaping

a financial standpoint, health complications linked to vaping are poised to impose a substantial burden on employer health plans. As these issues become more prevalent, there is a potential for a corresponding increase in healthcare costs. This escalation may lead to higher insurance premiums for employers employees, challenging the sustainability and affordability of offered health benefits.

### Health Analytics Connect: Your Partner in Vaping Trend Analysis

Health Analytics Connect emerges as a vital partner for employers and insurers in navigating these complexities. Leveraging the power of cutting-edge data analytics, Health Analytics Connect provides comprehensive insights into vaping trends within your workforce. Our platform enables predictive modeling and trend analysis, equipping you with the tools for informed decision-making and effective policy development.

With Health Analytics Connect, you can access a suite of analytical tools tailored to identify risk patterns, quantify financial implications, and support the development of targeted health initiatives. Our solutions are designed to help you stay ahead of the curve in understanding the evolving landscape of vaping and its impact on employee health and your bottom line.

Author(s):
Denise Zeman
Joulan Wu
Kevin O'Mara
Title: Principals & Co-Founders



Emerging data, including from the 2015-2018 National Health Interview Surveys, indicate healthcare costs linked to vaping reaching \$15.1 billion.

These costs stem from increased medical claims and treatment expenses for vaping-related illnesses, including lung injuries, cardiovascular disorders, and respiratory complications. Such trends present significant financial and health risks to employer-sponsored health plans.

The Challenge of Underreporting and Cost Implications in Vaping Data

A key challenge identified in our research is the significant underreporting of vaping within insurance claims, which obscures its comprehensive impact on healthcare costs and employee well-being. Our analysis, categorizing individuals into groups of vaping, nicotine dependence, and others, reveals a notable trend: vaping-related health issues, though less commonly reported, are associated with higher medical costs compared to traditional nicotine use. This trend raises concerns about the accuracy of data capture in vaping behavior and its subsequent health effects.

Our research analyzed average healthcare costs across various categories, such as respiratory, psychiatric, and cardiovascular conditions. We observed that individuals identified as vaping users incurred higher costs in all these categories compared to those with nicotine dependence. Notably, the vaping group was, on average, younger than the nicotine-dependent group, which further underscores the potential long-term healthcare implications. This age disparity was particularly evident when we focused our analysis on the 19-39 age group. However, the limited size of the vaping group in our dataset warrants caution in drawing definitive conclusions, indicating the need for broader data for more comprehensive insights.

The underreporting phenomenon with vaping, which mirrors trends seen in behaviors like smoking and alcohol consumption, poses a unique challenge due to vaping's more recent emergence and evolving product landscape. Consequently, this situation calls for the development of more robust data collection methods. Comprehensive strategies, such as detailed employee health surveys and thorough electronic medical records (EMRs) reviews, are suggested to assess vaping-related health risks more accurately. These improved methodologies could provide a clearer picture of the true scope and impact of vaping, aiding employers and healthcare providers in developing more effective health interventions and policies.

SDoH Analysis: NCBI National Health Interview Study

Integrating the NCBI National Health Interview Study into our analysis offers valuable insights into tobacco use trends among young adults. The study shows a significant shift from conventional cigarette smoking to e-cigarette use, particularly among specific demographics like non-Hispanic white male youth and individuals with lower educational attainment or living below the poverty level. These trends underline the need or employers to design targeted smoking cessation

programs and health initiatives, especially tailored to these disparities.

Comparative Analysis and Recognizing Red Flags

Comparative analysis suggests that vaping might be significantly more underreported than other behaviors. When vaping appears in claims data, it often indicates severe health issues, such as respiratory and mental health problems, signaling the need for targeted health interventions and support within the workplace.

These insights are vital for employer health plans. The shifting preference towards e-cigarette use among young adults signals a change in the types of health risks and associated costs. Understanding these trends can aid employers in designing effective smoking cessation programs and health initiatives, especially tailored to address the highlighted disparities.

Moreover, the linkage between initial e-cigarette use and later cigarette smoking emphasizes the need for early intervention. Educating younger employees about the risks associated with e-cigarette use could be key in mitigating long-term health risks and controlling associated costs within employer health plans.

Employers must consider these evolving tobacco use dynamics in their workplace health policies and insurance plans. Customizing tobacco control programs and interventions to align with these trends and disparities can significantly contribute to creating healthier work environments and managing healthcare costs more effectively.

#### The Role of Data Analytics

Data analytics, as showcased by platforms like Health Analytics Connect, is pivotal in understanding vaping trends. Employers can use data-driven insights for informed decision-making and developing targeted interventions and educational programs.

In navigating the vaping challenge, data analytics plays a pivotal role. By harnessing the power of data, employers can gain insights into the prevalence and impact of vaping within their workforce. Data analytics can help identify trends, pinpoint areas of concern, and quantify the financial implications of vaping-related health issues.

Through predictive modeling and trend analysis, data analytics equips employers with essential information for informed decision-making. Employers can develop targeted interventions, such as smoking cessation programs, based on data-driven insights to mitigate the impact of vaping on both employee health and the financial stability of health insurance plans.

Managing the vaping challenge requires a multifaceted approach incorporating data analytics. It is essential to understand the complexities of vaping trends and their impact on health insurance and employee well-being. Employers who proactively address vaping-related issues, guided by data analytics, are more likely to cultivate a healthy and productive workforce while effectively managing the financial and regulatory aspects of the vaping phenomenon.