Stata's *lincom* command. Statistical significance was defined as $P < .05$ (2-sided).

The University of Michigan institutional review board approved the study. Informed consent (active or passive per school policy) was obtained from the parents for students who were younger than 18 years and from the students who were aged 18 years or older.

Results | The number of students randomly selected to receive the marijuana vaping questions was 14 560 of 43 703 in 2017, 14 857 of 44 482 in 2018, and 28 346 of 42 531 in 2019.

In 2019, past 30-day prevalence of marijuana vaping was reported by 3.9% (95% CI, 3.3%-4.7%) of 8th graders, 12.6% (95% CI, 11.1%-14.3%) of 10th graders, and 14.0% (95% CI, 12.6%-15.5%) of 12th graders (**Table**).

Reported past 30-day prevalence levels significantly increased from 2018 to 2019. The absolute increases were 1.3% (95% CI, 0.4%-2.2%; $P = .006$) in 8th graders, 5.6% (95% CI, 3.7%-7.5%; $P < .001$) in 10th graders, and 6.5% (95% CI, 4.7%-8.4%; $P < .001$) in 12th graders. Among 12th graders, this increase was significantly larger than the increase from 2017 to 2018 by an absolute difference of 4.0% (ie, 6.5% − 2.5% [95% CI, 1.3%-6.8%]; $P = .004$). Among 10th graders, the increase was by 2.9% (ie, 5.6% − 2.7% [95% CI, 0.1%-5.7%]; $P = .04$).

Results were similar for use during the past 12 months and lifetime use. Prevalence increases in every year were statistically significant for all grades. For all reporting intervals, the prevalence increases among 12th graders were larger from 2018 to 2019 than from 2017 to 2018 (Table).

In 2019, near daily marijuana vaping was reported by 0.8% (95% CI, 0.6%-1.2%) of 8th graders, 3.0% (95% CI, 2.3%-4.0%) of 10th graders, and 3.5% (95% CI, 2.9%-4.3%) of 12th graders (Table).

Discussion | Reported adolescent marijuana vaping increased from 2018 to 2019. The absolute increases from 2018 to 2019 among 12th graders for past 30-day use are the second largest, single-year increases ever tracked by Monitoring the Future for any substance in its 45-year history (increased nicotine vaping from 2017 to 2018 ranks first).[2]

Study limitations include potential for reporting error and the absence of high-school dropouts.

As the number of adolescents who vape marijuana increases, so too does the scope and effect of any associated health consequences, which may include lung injury when using black market formulations.[4] The rapid rise of marijuana vaping indicates the need for new prevention and intervention efforts aimed specifically at adolescents.

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COMMENT & RESPONSE

HIPAA in the Era of Data Sharing

To the Editor In their Viewpoint on emerging threats to patient privacy, Mr Cohen and Dr Mello[1] offered an innovative prescription for improved governance of data sharing between hospitals and technology companies. However, the authors' characterization of current privacy laws, especially the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule,[2] as insufficiently burdensome would no doubt come as a surprise to many practicing physicians.[3] The authors categorized HIPAA's lack of a private right of action as a "shortcoming."[1] How many clinicians view more lawsuits as the cure for the US health care system's ills? Notwithstanding the HIPAA enforcement role of the US Department of Health and Human Services (DHHS), there is already widespread concern that state courts are treating HIPAA rules as the applicable standard of care informing malpractice claims.[4] Allowing express HIPAA litigation would constitute further (and potentially massive) expansion of physician liability.

The authors dismissed HIPAA as an obsolete "20th-century" privacy statute.[1] Yet, the 1996 HIPAA legislation was not a privacy law[3]; it was an insurance statute with a provision instructing the DHHS to issue privacy regulations if Congress did not act.[5] When Congress stayed on the sidelines, the DHHS filled the void. The HIPAA Privacy Rule was finalized in 2002, mandated compliance by 2003, and underwent significant revision in 2013 to incorporate new congressional mandates.[2] The HIPAA privacy provisions were not adopted in 1996; they are a predominantly *21st-century* set of standards, even if (like most legal developments) the relevant protections have lagged behind technological advancements.

In their discussion of patient permission to release medical information, Cohen and Mello[1] stated that a HIPAA authorization is less robust than consent. Under the HIPAA framework, the opposite is true. The HIPAA Privacy Rule specifies that an individual's consent to disclose health data is insufficient when an authorization is required. Unlike consent, a valid HIPAA authorization must contain 6 core elements and 3 required statements.[2] This is why hospital attorneys recommend use of a standard HIPAA authorization form rather than ad hoc procedures for release of information.

The authors made a convincing case for a better way to handle data partnerships between the medical and technology industries. New HIPAA burdens on physicians are not the way to do it. Additional regulatory requirements and liabilities pave the way for more confusion and frustration, not effective governance.

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In Reply We agree with Mr Kels that HIPAA has involved burdens for physicians—some real and others amplified by uncertainty and fear of liability. However, Kels misread our Viewpoint[1] insofar as he suggests that we are arguing for a private right of action to increase physicians' liability under HIPAA. Such a move would do little to help regulate many uses of health data by technology companies because they fall outside HIPAA's scope.

We have less faith than Kels in the practice of asking patients to sign authorization forms for release of their health information as an ethical bulwark. Regardless of the number of informational points included in standard-form releases, they fall short of the ethical ideal of informed consent because patients ordinarily do not have the chance to ask questions and cannot foresee the many uses to which their health data may be put in the future.

Instead, we argued for a more wide-scale reimagining of health privacy law in the United States, moving the regime from one focused on stripping specific identifiers or getting authorization from individuals to one that includes more robust, dynamic governance arrangements, such as data access committees.

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Herd Protection Against Oral HPV Infection

To the Editor Dr Chaturvedi and colleagues[1] provided evidence for herd protection against oral human papillomavirus (HPV) infections in unvaccinated individuals aged 18 to 59 years in the United States. We are concerned about several potential problems in their study design.

First, the authors evaluated herd protection by comparing the prevalence of 4 vaccine types (HPV-16/-18/-6/-11) and 33 nonvaccine types. However, protection from nonvaccine types may not be independent of vaccine types. Both the bivalent HPV vaccine (HPV-16/-18), which was widely used since 2009, and the quadrivalent HPV vaccine can induce strong cross-protection against HPV-31, HPV-33, and HPV-45.[2] Bivalent HPV vaccine can protect against 93.8% of HPV-31, 79.1% of HPV-33, and 82.6% of HPV-45.[3]

Second, we believe the age range of 18 to 59 years is too wide to estimate herd protection. HPV vaccination was recommended for males and females aged 9 to 26 years because it can only prevent new HPV infections instead of treating existing infections. Since most sexually active adults have already been exposed to HPV, adults aged 27 years and older will get limited benefit from HPV vaccination and herd protection. Moreover, a significant bimodal distribution of oral HPV infection by age was observed for men, and almost 22.6% of oral HPV infections occurred among individuals aged 55 to 64 years.[4] Various reasons could lead to high prevalence of oral