



Scott Gottlieb steps down from US FDA leadership

The announcement came as a surprise, prompting many to ask: Can the US FDA commissioner's policies continue without him? Susan Jaffe reports.

On March 5, less than a week before Scott Gottlieb announced that he was resigning as commissioner of the US Food and Drug Administration (FDA), he told a congressional committee that this is a crucial time for the agency.

"The opportunities that we have across our entire portfolio to enhance health and wellbeing and protect consumers exceed any comparable period of rapid technological change, in my opinion", Gottlieb, told the House of Representatives appropriations subcommittee on Agriculture, Rural Development, and the Food and Drug Administration. "We are also undertaking one of the most significant policy modernisations at the agency in decades."

Under Gottlieb's leadership, the FDA has cracked down on what he calls an epidemic of teenagers using electronic cigarettes, proposed a ban on menthol cigarettes, and recommended lowering the amount of nicotine allowed in cigarettes. And although the agency does not have a direct role in drug prices, it has ramped up approval of generic drugs, to boost competition and reduce drug costs.

Although it's not unusual for top administration officials to leave 1–2 years before a presidential campaign and other political races divert attention from the contentious business of governing, Gottlieb's departure surprised some Washington observers. But not Robert Califf, his predecessor, who headed the FDA during the Obama administration prior to serving as Deputy Commissioner of FDA's Office of Medical Products and Tobacco.

"You get most of the policy work done in the first 12 months of an administration", said Califf, a professor of cardiology at Duke University School of Medicine and senior adviser to Verily, the digital health subsidiary of Alphabet. He

was also FDA's deputy commissioner for medical products and tobacco before he took over as the agency's commissioner. But, as more months go by, "everybody's looking to the next election".

Gottlieb, an internal medicine physician who served two previous 2-year stints at the FDA, said leaving was a tough decision. "This is the best job I

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will ever have", he told *The Washington Post*, but said that he needed to spend more time with his wife and their three daughters.

Reporters have been unable to determine whether his explanation conceals some other reasons, perhaps a conflict with his superiors, Health and Human Services Secretary Alex Azar or President Donald Trump.

When rumours of his dissatisfaction began circulating 2 months ago, Gottlieb tweeted on Jan 3, "I'm not leaving. We've got a lot [of] important policy we'll advance this year."

Only a few hours after receiving Gottlieb's letter of resignation, Trump said in a tweet, "Scott has helped us to lower drug prices, get a record number of generic drugs approved and onto the market, and so many other things. He and his talents will be greatly missed!"

Gottlieb also has received mild accolades from some critics. The Senate approved his nomination in 2017 by fewer votes than any of his recent predecessors, and over the strong objections of 42 Democrats. They were concerned about his previous work and investments in the drug industry and

whether he could resist pressure from the Trump administration. He was a partner in a venture capital firm that invested in health-care companies and a resident fellow at the conservative American Enterprise Institute.

Washington state Senator Patty Murray, the senior Democrat on the Senate Committee overseeing the FDA, was among those who voted against Gottlieb's nomination, even after he promised to recuse himself for 1 year from decisions involving more than 20 companies for which he worked or in which he held investments.

"I was a sceptic, but while we didn't agree on everything, I do think Dr Gottlieb has done an excellent job working with Congress", she said.

Peter Lurie, a former FDA associate commissioner for public health strategy and analysis during the Obama and Trump administrations, also had disagreements with Gottlieb. "But at least he was squarely in the tradition of previous FDA commissioners who understood the role of the agency and who valued the role of science in determining agency policy", said Lurie, president of the Center for Science in the Public Interest.

High-profile job

Unlike some government agencies that can toil peaceably in relative obscurity, the FDA is frequently in the headlines. It is responsible for ensuring the safety of products that account for about 20 cents of every dollar US consumers spend—or US\$2.5 trillion annually.

These products include a wide range of somewhat incongruous items, including generic and brand-name medicines for people and animals, biosimilar drugs, cosmetics, dietary supplements, implants, diagnostic and other medical devices, gene therapy, tobacco and electronic cigarettes, and

fresh produce, meat, and fish, which are all made, grown, or farmed in the USA or imported from more than 150 countries. The FDA's 18 212 employees work primarily in the USA, but also in China, India, Brussels, the Netherlands, the UK, and Latin America.

Gottlieb also presided over implementing the 21st Century Cures Act, which intended to accelerate the discovery and delivery of new drugs and medical devices, to expand opioid addiction treatment, and to reform mental health care. The law also enabled the FDA to hire more staff at competitive salaries. When he became commissioner in 2017, agency had an estimated 1000 vacancies which has now risen to 1400.

The agency approved or temporarily approved 1021 generic drugs in 2018, almost as many as 2017's record breaking 1027 applications. "Gottlieb understood that approvals were not enough to spur competition", according to the Association for Accessible Medicines, a trade group that represents generic drug companies. He "used his bully pulpit to speak out early and forcefully about brand drug companies withholding samples needed by generic drug makers, about rebate traps, and other anti-competitive abuses in the pharmaceutical supply chain".

The FDA has published the names of branded pharmaceutical companies that are reluctant to provide samples and other information to generic drug manufacturers online, as well as scrutinising other activities that can stymie competition.

Despite this new attention, the Pharmaceutical Researchers and Manufacturers of America, which represents brand-name drug companies, praised Gottlieb for pursuing "innovation in drug development and review, increased competition, and [advancing] the regulatory framework for approving novel technologies, including gene therapies".

Califf said that Gottlieb led the FDA in "an era where there's a lot of doubt about science, and he navigated the

science issues extremely well", citing his defence of vaccines and cracking down on misleading claims from some dietary supplement manufacturers. "Taking on the vaping industry was a major effort."

Cigarette crusade

Last November, Gottlieb unveiled a plan to strengthen regulation of tobacco and nicotine. This plan includes proposals to lower nicotine in cigarettes to minimally or non-addictive levels and to increase access to medicinal nicotine products to help smokers quit.

It also includes a package of steps to address what Gottlieb called an "astonishing increase" of 78% in high-school students' use of e-cigarettes between 2017 and 2018, and a 48% increase among middle-school students.

"These data shock my conscience", Gottlieb said in November. The jury is still out on whether e-cigarettes can help adults avoid the dangers posed by tobacco smoke, and on whether e-cigarettes could threaten the health of young people. The advantages of e-cigarettes for adults trying to quit tobacco cigarettes "cannot, and will not, come at the expense of addicting a generation of children to nicotine through these same delivery vehicles", he said. "I will take whatever steps I must to prevent this."

The FDA stepped up enforcement of the ban on selling e-cigarettes to minors. He has also signalled FDA's willingness to take tougher action, including restricting the purchase of most flavoured e-cigarettes to adults, in-person retail stores and requiring stricter age verification for online sales.

"The small and medium-sized [retail] businesses are living on borrowed time", said George Conley, president of the American Vaping Association. Unless the deadline changes, these businesses have until 2022 to request FDA permission to continue to sell e-cigarettes. Unlike large cigarette companies, Conley said they don't have the millions of dollars to submit the health data and other documentation

the application requires. He would give Gottlieb's work at FDA a C+ grade.

Next up

Gottlieb is expected to leave his job in early April, and an acting commissioner will serve in his place. He has recommended some possible candidates and the search for a permanent replacement is already underway. The fate of many of Gottlieb's plans is uncertain. "Did he stay long enough to ensure that these things will actually get past the finishing post?" Lurie wondered. Much depends on Gottlieb's successor.

"Of the people who were considered last time around, some were people who were deeply concerning to anybody with an interest in the public health", said Lurie. In addition to Gottlieb, one of the leading candidates for the job supported eliminating much of the FDA's drug approval process.

"I would hope they would get somebody who understands regulation and science", said Califf. "There are daunting issues that could go really well or really bad depending on how they're handled—the digital explosion, the genetic engineering changes, the cell therapy issues."

In addition to a strong science background, the next FDA commissioner will need the mettle to do the job, said Califf. "It's a job where, every day, people are using you as a target because every decision the FDA makes upsets somebody."

Susan Jaffe



Aaron Bernstein/Reuters