selves. Studies involving these agents are under way, but definitive results will not be available for several years.

Indicated procedures in pregnant women and young children that can safely be delayed are rare. Until reassuring new information from well-designed clinical trials is available, we are concerned that

An audio interview with Dr. Greene is available at NEJM.org

the FDA warning will cause delays for necessary surgi-

cal and diagnostic procedures that require anesthesia, resulting in adverse outcomes for patients. We would urge parents, patients, and physicians to carefully consider the risks of delaying indicated procedures. The warning also states that "additional high quality research is needed to investigate the effects of repeated and prolonged anesthesia exposures in children, including vulnerable populations." We fully support this effort, including outcome studies specifically for fetuses exposed to general anesthetic and sedative agents in utero.

Disclosure forms provided by the authors are available at NEJM.org.

From the Department of Anesthesiology, Texas Children's Hospital and Baylor College of Medicine, Houston (D.B.A.); and the Department of Obstetrics and Gynecology, Massachusetts General Hospital, Boston (M.F.G.).

This article was published on February 8, 2017, at NEJM.org.

- Sanders RD, Hassell J, Davidson AJ, Robertson NJ, Ma D. Impact of anaesthetics and surgery on neurodevelopment: an update. Br J Anaesth 2013:110:Suppl 1:i53-i72.
- **2.** Wilder RT, Flick RP, Sprung J, et al. Early exposure to anesthesia and learning disabilities in a population-based birth cohort. Anesthesiology 2009;110:796-804.
- 3. Davidson AJ, Disma N, de Graaff JC, et al. Neurodevelopmental outcome at 2 years of age after general anaesthesia and awake-regional anaesthesia in infancy (GAS): an international multicentre, randomised controlled trial. Lancet 2016;387:239-50.
- **4.** Sun LS, Li G, Miller TL, et al. Association between a single general anesthesia exposure before age 36 months and neurocognitive outcomes in later childhood. JAMA 2016;315:2312-20.
- **5.** Pinyavat T, Warner DO, Flick RP, et al. Summary of the update session on clinical neurotoxicity studies. J Neurosurg Anesthesiol 2016;28:356-60.

DOI: 10.1056/NEJMp1700196
Copyright © 2017 Massachusetts Medical Society.

Success and Failure in the Insurance Exchanges

Craig Garthwaite, Ph.D., and John A. Graves, Ph.D.

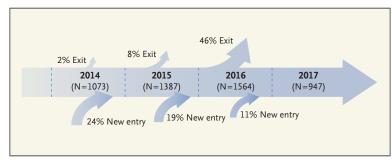
The results of the 2016 election portend a vigorous 2017 debate about the future of the Affordable Care Act (ACA). Both President Donald Trump and large fractions of the Republican majority party in the House and Senate campaigned on an explicit pledge to repeal and replace the ACA. At least part of the impetus for these promises is a general belief that the ACA's state-based insurance marketplaces are unworkable and are resulting in higher prices and fewer choices.

In 2016, the ACA marketplaces facilitated coverage purchases for approximately 13 million people nationwide.¹ But many prominent national insurers have struggled in these markets. Both UnitedHealth and Aetna experienced heavy financial losses and, in 2016, announced they would exit many of the areas they had been serving;

Anthem recently warned that it would also consider leaving if its financial results do not improve.^{2,3}

The actions of these large national insurers are part of a broader trend of marketplace exits. We estimate that in the 34 states for

which we have data, the number of insurers offering plans on the exchanges fell by nearly half between 2016 and 2017 (see diagram). This decline reversed a pattern seen in earlier years, when the number of insurers entering



Market Entries and Exits in State Insurance Marketplaces, 2014-2017.

The analysis included insurers participating in the ACA's health insurance marketplaces in 428 rating areas in 34 states (Alabama, Alaska, Arizona, Arkansas, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Michigan, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming). The unit of observation was the insurer—rating-area dyad.

the market far outpaced the number leaving.

Many of the exiting firms have claimed they were leaving because the ACA's unfulfilled risk-corridor payments and insufficient risk-adjustment policies created unstable risk pools that have caused steep losses unrelated to their market strategies. However, though these factors probably caused difficulties for many participating firms, the creation of any new market is an inherently uncertain

most of the ACA-replacement proposals would actually increase the role of private firms in providing insurance to millions of Americans. It is therefore important to understand how much the inability of some private insurers to succeed under the ACA reflects a failure of existing policies and how much it indicates a mismatch between firms' capabilities and the newly created market.

Anecdotal evidence supports the argument that the skills of

How much does the inability of some private insurers to succeed under the ACA reflect a failure of existing policies and how much does it indicate a mismatch between firms' capabilities and the newly created market?

process, and it's reasonable to expect that some firms will fail while others thrive. In particular, the ACA's insurance-market reforms required firms to develop and market new products that were attractive to low-income Americans who faced few access and pricing restrictions based on their underlying health status.

An individual insurance market that shares many of these features is a centerpiece of current GOP reform efforts. For example, Trump and numerous Republican leaders have signaled their desire to maintain certain consumer protections, such as guarantees of coverage to people with preexisting conditions. Moreover, through either the use of refundable tax credits or increased privatization of Medicaid as the result of turning the program into block grants,

particular insurers may not have been well suited to these marketplaces. Many of the exiting firms, such as UnitedHealth, have primarily covered enrollees in the self-insured-employer market, in which insurers provide administrative services and are not primarily responsible for bearing actuarial risk or for developing products targeting low-income consumers. In addition, many of the assets that have proven quite valuable in the self-insured market — such as a large national footprint that is attractive to multistate employers — may not be particularly useful in statebased individual insurance marketplaces.

Furthermore, smaller and more focused insurers are earning profits in the new market and are aggressively entering new geo-

graphic areas. For example, Centene and Molina have both had financial success in the ACA marketplaces.4 Unlike the firms whose exit decisions have attracted so much attention, these two insurers have historically operated in the Medicaid managed-care market — that is, they are private firms that contract with state governments to offer managedcare plans to Medicaid enrollees. Success in these markets requires, among other factors, setting premiums and managing the health risks of a low-income population.

To examine more systematically whether poor insurer strategies may have contributed to market exits, we combined information on insurer participation in the marketplaces for the 34 states with available data for 2016 and 2017. These data included information on premiums, provider networks, and insurers' local experience with other populations such as Medicaid beneficiaries. We used this information to investigate factors associated with a sustained presence in the ACA's nascent insurance markets.

The differences between Silver plans (the most frequently purchased plan type in the marketplaces; see the Supplementary Appendix, available at NEJM.org) that continue to be offered and those whose issuers exited the market in 2017 are summarized in the table. The reported adjusted differences are based on comparisons between exiting and remaining plans within the same market. (Additional details about the data and statistical methods appear in the Supplementary Appendix.)

Our data show that the exiting plans offered an unappealing combination of smaller provider

Plan and Issuer Characteristics by 2017 Marketplace Participation Status.*			
Characteristic	Mean	Unadjusted Difference (95% CI)	Adjusted Difference (95% CI)
Plan characteristics			
Monthly premium (unsubsidized individual policy for 35-year-old nonsmoker)			
Participating in 2016 and 2017	\$326	Reference group	Reference group
Exiting marketplace after 2016	\$340	14.0 (11.7 to 16.4)	16.1 (14.3 to 17.8)
Hospital network breadth			
Participating in 2016 and 2017	67.1%	Reference group	Reference group
Exiting marketplace after 2016	61.9%	-5.2 (-6.5 to -3.9)	-7.9 (-8.9 to -6.9)
Primary care physician network breadth			
Participating in 2016 and 2017	63.7%	Reference group	Reference group
Exiting marketplace after 2016	66.1%	2.4 (1.2 to 3.6)	0.01 (-0.9 to 0.9)
Behavioral health physician network breadth			
Participating in 2016 and 2017	65.3%	Reference group	Reference group
Exiting marketplace after 2016	46.8%	-18.5 (-20.0 to -17.0)	-25.2 (-26.4 to -24.0)
Insurer characteristics			
Medicaid managed care: company has any experience			
Participating in 2016 and 2017	51.5%	Reference group	Reference group
Exiting marketplace after 2016	43.5%	-8.0 (-10.1 to -5.9)	-17.8 (-19.8 to -15.9)
Fully insured commercial market share			
Participating in 2016 and 2017	30.4%	Reference group	Reference group
Exiting marketplace after 2016	36.0%	5.6 (4.1 to 7.1)	-8.8 (-9.7 to -7.9)

^{*} Data are from our analyses of Silver plan characteristics in 34 states, based on data from the Centers for Medicare and Medicaid Services, issuers' provider networks, and county-level issuer enrollment data from Decision Resources Group. States included Alabama, Alaska, Arizona, Arkansas, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Michigan, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming. The unit of observation is the market–plan dyad, with markets defined by health insurance rating areas within each state (N=8824). The 95% confidence intervals were calculated with the use of bootstrapping. Adjusted differences are the average differences among comparisons of plans within the same market (see the Supplementary Appendix). The network-breadth measures quantify the percentage of local hospitals or physicians (by specialty) within the plan's network. Market share was based on the health insurance rating area.

networks and higher premiums. For example, an unsubsidized 35-year-old person enrolled in one of the plans that was discontinued would have paid, on average, \$16 more per month for a plan with 8% fewer local in-network hospitals than a similar person enrolled in a plan that was not discontinued. Exiting plans were similar to remaining plans in terms of primary care physician networks, but they had

substantially smaller networks of behavioral health clinicians.

We also considered the association between the prior experience of firms in managing risk and setting premiums and the decision about whether to exit the market. First, we examined whether plans with more experience in the Medicaid managed-care market were more likely to remain. Regardless of whether we defined such experience at

the national, state, or market level, we found a consistent positive association between this experience and remaining in the exchange market in 2017. We also examined exit decisions among insurers with experience operating private insurance plans in which they bear actuarial risk, as opposed to plans in which they provide only administrative services to self-insured groups. Here, too, we found that the

insurers that remained in the exchange market had a greater local market share of fully insured products.

In supplementary analyses, we also compared characteristics of insurers and plans entering the exchange market in 2017 and found that new plans had substantially lower premiums than their local competitors (premiums are \$30 per month lower for a 35-year-old enrollee). Moreover, issuers of these new plans were more likely to have experience with Medicaid managed care but less likely to have direct experience in the markets they entered. This finding is consistent with the existence of a functioning market in which firms that were initially successful are moving into new geographic areas.

Taken together, our estimates demonstrate that the insurers participating in the exchange market in 2017 are systematically different from the firms that have exited it. Furthermore, the dimensions on which they differ, such as experience in pricing premiums and managing risk for low-income populations, may be those most likely to contribute to commercial success in a reformed nongroup market. It is possible that the experience of insurers operating in the 17 state-based marketplaces we did not examine could be different; further work examining those marketplaces would be useful. But claims that the failure of certain insurers is evidence of unworkable policies seems misguided. The available data reveal patterns of market entry and exit that are consistent with natural competitive processes separating out firms that are best suited to adapt to a new market. We believe that efforts to reform or replace the ACA should therefore proceed with the knowledge that highly publicized market exits are

a poor and probably inaccurate signal of a failing market.

Disclosure forms provided by the authors are available at NEJM.org.

From the Kellogg School of Management, Northwestern University, Evanston, IL (C.G.); and Vanderbilt University School of Medicine, Nashville (J.A.G.).

This article was published on February 1, 2017, at NEJM.org.

- 1. Levitt L, Claxton G, Damico A, Cox C. Assessing ACA marketplace enrollment. Kaiser Family Foundation issue brief. March 2016 (http://files.kff.org/attachment/issue-brief-assessing-aca-marketplace-enrollment).
- 2. Johnson CY. UnitedHealth Group to exit Obamacare exchanges in all but a 'handful' of states. Washington Post. April 19, 2016 (https://www.washingtonpost.com/news/wonk/wp/2016/04/19/unitedhealth-group -to-exit-obamacare-exchanges-in-all-but-a -handful-of-states/).
- **3.** Tracer Z. Anthem threatens Obamacare retreat if results don't improve. Bloomberg Businessweek. November 2, 2016.
- **4.** Wilde Matthews A. Molina outperforms rivals in ACA marketplaces. Wall Street Journal. October 6, 2016.

DOI: 10.1056/NEJMp1614545
Copyright © 2017 Massachusetts Medical Society.

At Risk for Serious Mental Illness — Screening Children of Patients with Mood Disorders or Schizophrenia

Michel Maziade, M.D.

A 10-year-old boy has cognitive deficits, and his school performance and social skills have been deteriorating gradually since he was 7. Neither his 12-year-old brother nor his 14-year-old sister has similar problems. Their mother, a 37-year-old schoolteacher, has been treated for bipolar disorder since she was 28 and has had stable periods interrupted by acute episodes for which she was hospitalized. Recognizing that she shares cognitive dysfunctions with her younger son

and reminded by his difficulties of the similar ones she had at his age, she consults her family doctor, worried about her son's future mental health. Her doctor reassures her that her son still exhibits no seriously problematic behavior but adds that if the deterioration persists until adolescence, a psychiatric consultation could be considered. Unfortunately, most clinicians would similarly defer clinical investigation in this case.

There are situations in which current medical practice does not

reflect the relevant science, and the lack of attention to the millions of children born to a parent with schizophrenia, bipolar disorder, or recurrent major depression is a case in point. This neglect is out of phase with the massive need in primary care and the available scientific evidence.

Children with a parent who has serious mental illness can no longer be regarded as an extreme and isolated subpopulation. An estimated 4% of the populations of the Group of Seven (G7) indus-