



## Observations on Twitter and the ACA: Taking the Pulse of Obamacare

Twitter has launched a revolution in communications. With an avalanche of tweets sent every day, it has become an important platform for sharing news, ideas, and opinions.

Researchers now use Twitter to take the pulse of large groups of people on a variety of topics. As with any public opinion research, this approach has limitations, but it also allows for immediate access to a tremendous quantity of publicly available data.

Recognizing Twitter's importance in the national dialogue, CHCF used the social media phenomenon to track public perception of the launch of the ACA's health insurance marketplaces during the first open enrollment period that ran from October 2013 through March 2014. CHCF mined hundreds of millions of tweets, links, images, videos, and pins, using tools from Topsy, a San Francisco company (since purchased by Apple Inc.) that indexed, analyzed, and ranked social media content and trends.

### Obamacare's First Month

November 4, 2013

How did the public react on Twitter to the rollout of the federal and state health insurance marketplaces in the first month?

This first analysis examines traffic (volume of tweets), influencers (users whose tweets have the greatest reach), and sentiment. The Topsy sentiment score uses advanced natural language processing techniques to analyze the sentiment — positive or negative — of each tweet compared to the sentiment of everything else being discussed on Twitter. Each tweet is assigned a score from 0 to 100, with 50 being neutral sentiment and higher and lower scores representing positive and negative sentiment, respectively.

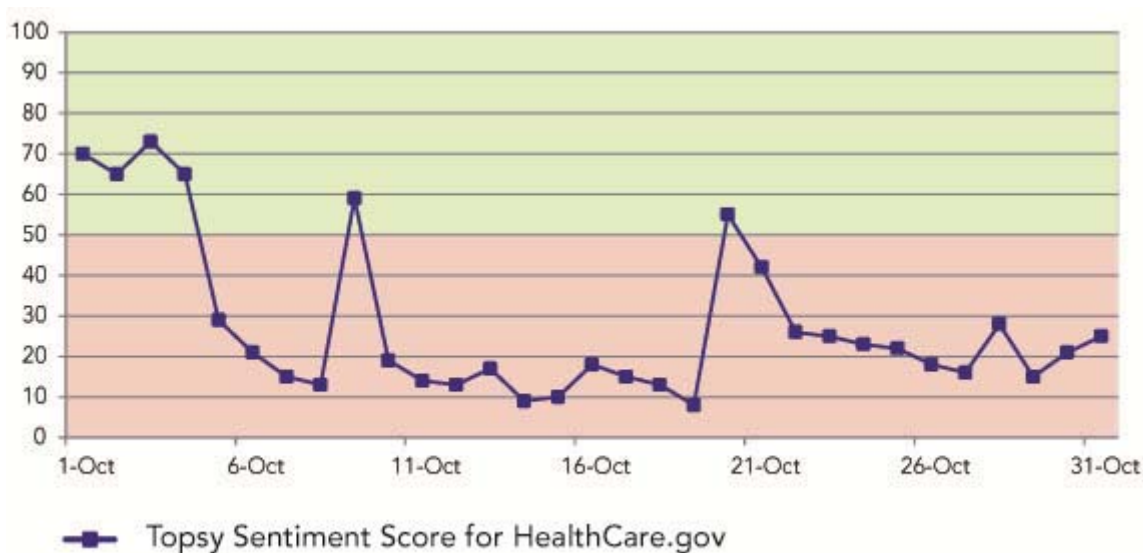
**OBSERVATION 1:** Obamacare was among the most tweeted topics in October 2013.

- Over 13.2 million tweets were related to Obamacare in this first month of pre-enrollment.

- #Obamacare was one of the top 10 hashtags for nine days in October. Other hashtags in the top 10 were related to the federal government shutdown, iPhone launch, MLB World Series, Justin Bieber, and The Voice.

**OBSERVATION 2:** Sentiment on Twitter about HealthCare.gov, the federal online marketplace for buying health insurance, was positive prior to its launch on October 1, but fell steadily after that.

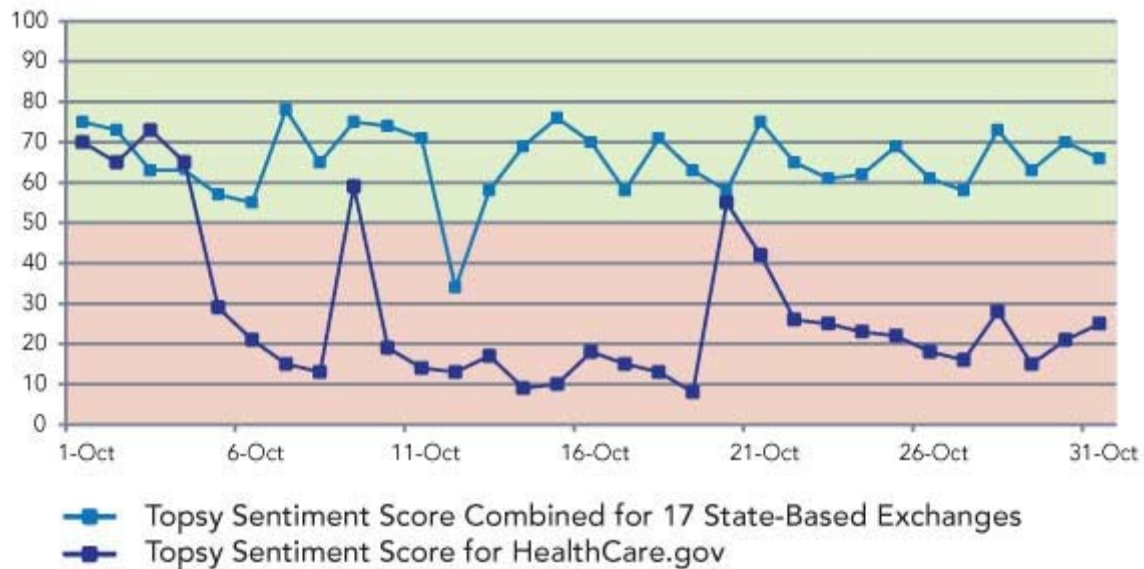
- In the days before its launch, the sentiment of tweets containing a link to HealthCare.gov trended positively, with a score of 74/100.
- By five days after the launch, after tens of thousands of people had tried to access HealthCare.gov, sentiment dipped significantly to a score of 29/100.



- One spike in positive sentiment occurred on October 20 in advance of the President Obama's Rose Garden speech, which took place the following morning. The conversation quickly turned negative during and following the speech.
- The volume of tweets containing search terms related to Obamacare and HealthCare.gov increased as a result of the Rose Garden speech: from 78,012 tweets within 24 hours before the speech; to 35,436 tweets during the hour of the speech itself; and then doubling to 185,184 tweets in the 24 hours after the speech.

**OBSERVATION 3:** Tweets about state-based exchanges were more positive than those about the federal exchange.

- The chart below plots the sentiment of Twitter conversations between October 1 and October 31 containing links to the websites for the 17 state-based exchanges, and compares their combined sentiment score with the sentiment of tweets containing a link to HealthCare.gov.



- The sentiment score of tweets containing a link to HealthCare.gov was 44 points lower than tweets containing links to the 17 state-based exchange sites combined. Since October 1, the state-based exchange sites had an overall positive sentiment score of 70/100. Conversely, HealthCare.gov had an overall negative sentiment score during this period of 26/100.

**OBSERVATION 4:** Celebrities who tweet about Obamacare reach millions of people.

Below are the five celebrities who were most frequently retweeted when they used #getcovered, the hashtag used by Enroll America and the White House. Their six tweets with this hashtag potentially reached more than 80,612,387 individuals.

1. Lady Gaga (40 million followers, 14.9K retweets)
2. Nina Dobrev (4 million followers, 1.4K retweets)
3. Pharrell Williams (2 million followers, 1.3K retweets)
4. John Legend (4 million followers, 982 retweets)
5. Emily VanCamp (320K followers, 499 retweets)



**OBSERVATION 5:** What will have traction on Twitter, and for how long, is hard to predict.

On October 22, the Colorado Consumer Health Initiative (CCHI) and ProgressNow Colorado launched an irreverent spoof on the "got milk?" ads. Its "got insurance?" campaign's message is

now popularly known as "brosurance," a term used in one of the ads. The campaign was aimed at the "young invincible" demographic and promoted the hashtag #GotInsurance and the website [doyougotinsurance.com](http://doyougotinsurance.com).

got insurance?

**Brosurance**

Keg stands are crazy.  
Not having health insurance is crazier.  
Don't tap into your beer money  
to cover those medical bills.  
We got it covered.

Now you can too.

thanks  
obamacare!

#GotInsurance  
[doyougotinsurance.com](http://doyougotinsurance.com)

Rob, Zach, & Sam  
Bros for Life

- Although #GotInsurance was the promoted hashtag, #brosurance began to dominate the conversation after October 22, and accelerated again when it was raised during HHS Secretary Sebelius' Congressional testimony on October 30. #Brosurance had a cumulative exposure of 8,215,992 compared to #GotInsurance's 2,109,967 in October. (Cumulative potential exposure for a tweet is measured by counting the total number of followers of the original tweeter and any retweeters.)
- The volume of #brosurance tweets rivaled the national "Get Covered" campaign for a short time. In the 24 hours after the Colorado "got insurance?" campaign launched, #getcovered had 3,450 tweets, and the organic #brosurance had 1,701.

## Obamacare's Second Month

December 9, 2013

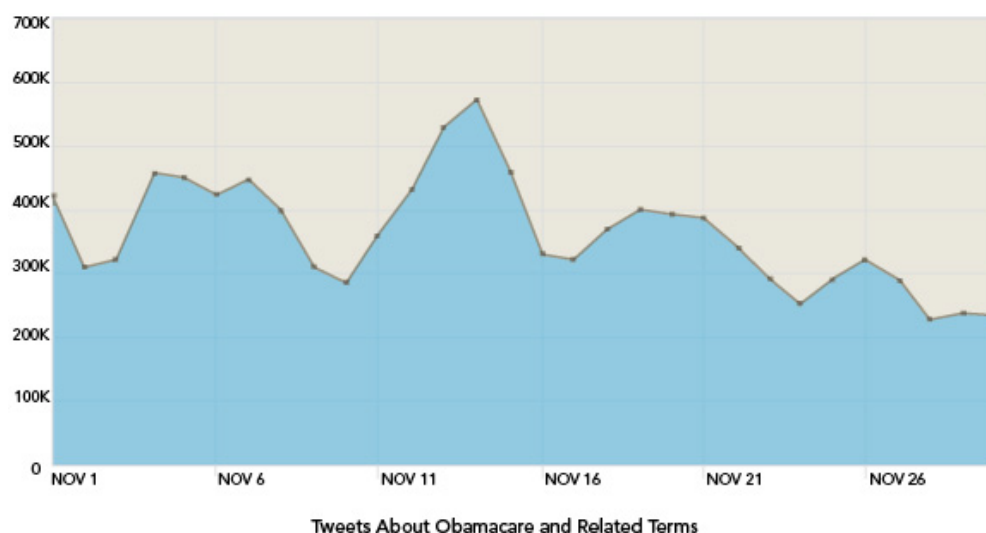
The conversation about Obamacare continues on Twitter in the second month of pre-enrollment. Ongoing problems with HealthCare.gov and some state-based marketplaces, lower than projected enrollment, individual policy cancellations, and the president's proposal that states allow individuals to keep existing plans dominated the news media and were widely discussed on Twitter.

This second in a series of analyses describes the Twitter conversation about Obamacare during the month of November 2013 and highlights several new observations.

These analyses examine traffic (volume of tweets), spikes in activity, and sentiment trending. The Topsy sentiment score uses advanced natural language processing to analyze the sentiment — positive or negative — of each tweet compared to the sentiment of everything else on Twitter. Each tweet is assigned a score from 0 to 100, with 50 being neutral sentiment and higher and lower scores representing positive and negative sentiment, respectively.

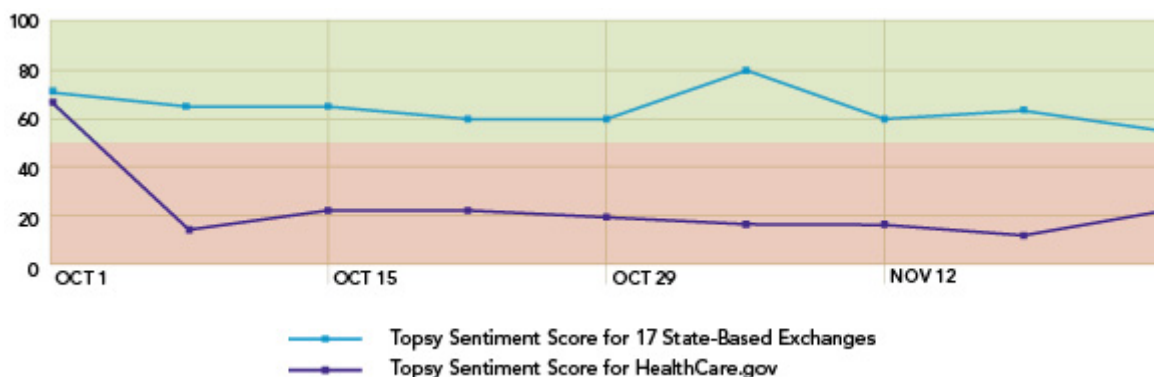
**OBSERVATION 1:** Obamacare continued to be among the most tweeted topics in November 2013.

- Over 10.8 million tweets in November 2013 were related to Obamacare and ACA implementation.
- There were several peaks in activity during the month: November 4-6 had 1.3 million tweets related to policies being canceled / keeping current plans, Medicaid expansion, and federal IT procurement rules; more than 570,000 tweets on November 14 followed the president's press conference; and more than 1.9 million tweets November 18-22 related to HealthCare.gov concerns and public response to the enrollment numbers.



**OBSERVATION 2:** Combined sentiment scores for state-based marketplaces fell in November but remained better than the sentiment score for HealthCare.gov.

- The average sentiment score of tweets containing a link to HealthCare.gov remained low in November (23/100), while the volume of tweets containing a link to HealthCare.gov decreased by more than 80,000 from October.
- The average sentiment of tweets containing a link to state-based marketplace sites (59/100) was higher than that for tweets linking to HealthCare.gov, but fell 11 points in November compared to October. The drop supports concerns that the problems with HealthCare.gov may be having a negative impact on state-based marketplace enrollment efforts.(1)



**OBSERVATION 3:** Relatively few Twitter conversations about Obamacare occur in Spanish or use Spanish hashtags.

- Latinos are a key enrollment audience for many state-based marketplaces and for HealthCare.gov — an estimated 10.2 million uninsured Latinos are newly eligible for coverage nationwide.(2) Twenty-eight percent of Latinos on the Internet say they use Twitter.(3) However, their language preferences in these discussions is not known.
- In October and November 2013, tweets containing Obamacare or #Obamacare numbered only 8,017 in Spanish compared with 4,563,362 in English.
- A search in Twitter for the Spanish hashtags #oursalud, #asegurate, #leydesalud, and #reformadesalud (selected for their relevance as determined by Topsy) for October and November 2013 in the US resulted in 2,607 tweets (1,380 in English and 1,227 in Spanish), potentially reaching more than 78 million people.

#### NOTES:

1. Brian Kalish, "[Officials: Fed Tech Issues Hurting State-Run Exchanges](#)," Health Data Management, 11/20/2013.
2. "[The Affordable Care Act and Latinos](#)," US Dept. of Health and Human Services, 9/20/2013.
3. Joanna Brenner and Aaron Smith, "[72% of Online Adults Are Social Networking Site Users](#)," Pew Research Center, 8/5/2013.



## Obamacare's Third Month

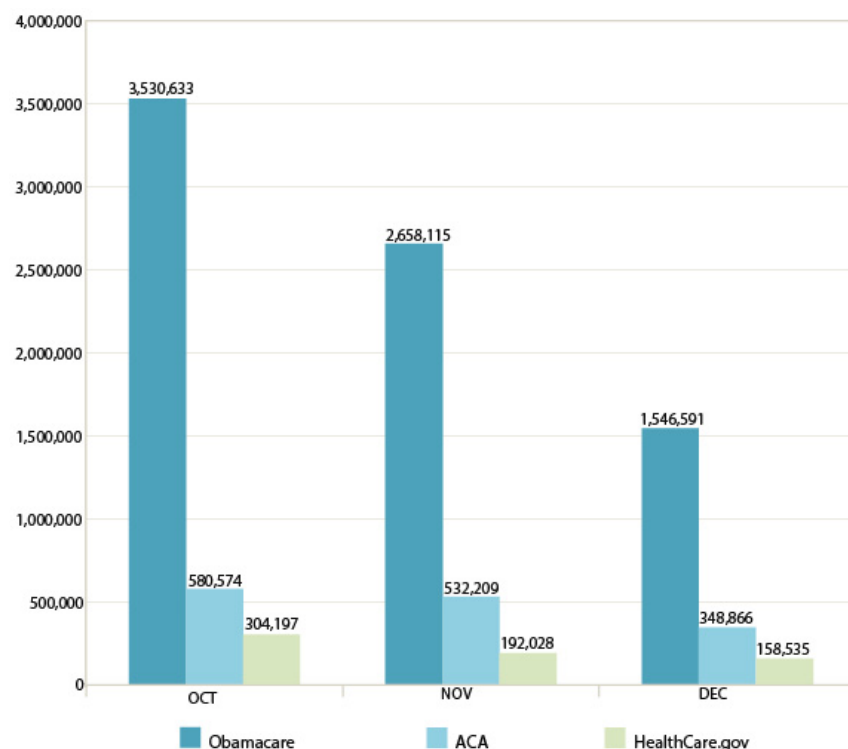
January 23, 2014

During Obamacare's third month of enrollment, the Twitter conversations turned to topics of affordability and uptake and moved away from the functionality of HealthCare.gov and state-based marketplace websites.

This third in a series of analyses illustrates the changing nature of the Twitter conversation about Obamacare. Observations focus on December 2013 with some additional data through January 15, 2014.

This analysis examines Twitter traffic (volume of tweets), spikes in activity, and sentiment trending. The Topsy sentiment score uses advanced natural language processing to analyze the sentiment — positive or negative — of each tweet compared to the sentiment of everything else being discussed on Twitter. Each tweet is assigned a score from 0 to 100, with 50 being neutral sentiment and higher and lower scores representing positive and negative sentiment, respectively.

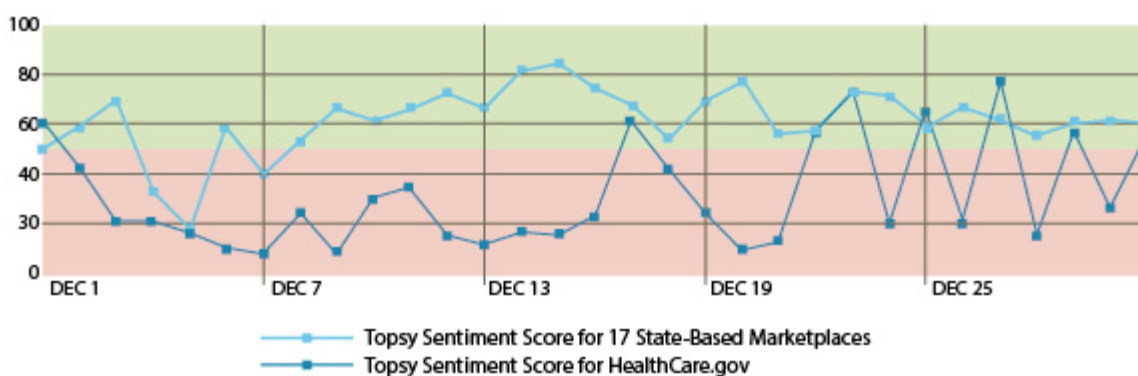
**OBSERVATION 1:** The conversation about Obamacare on Twitter has tapered off since the launch in October 2013. Over the last month in particular, the discussion has settled down as the performance of enrollment websites improved and a record number of people signed up for coverage.



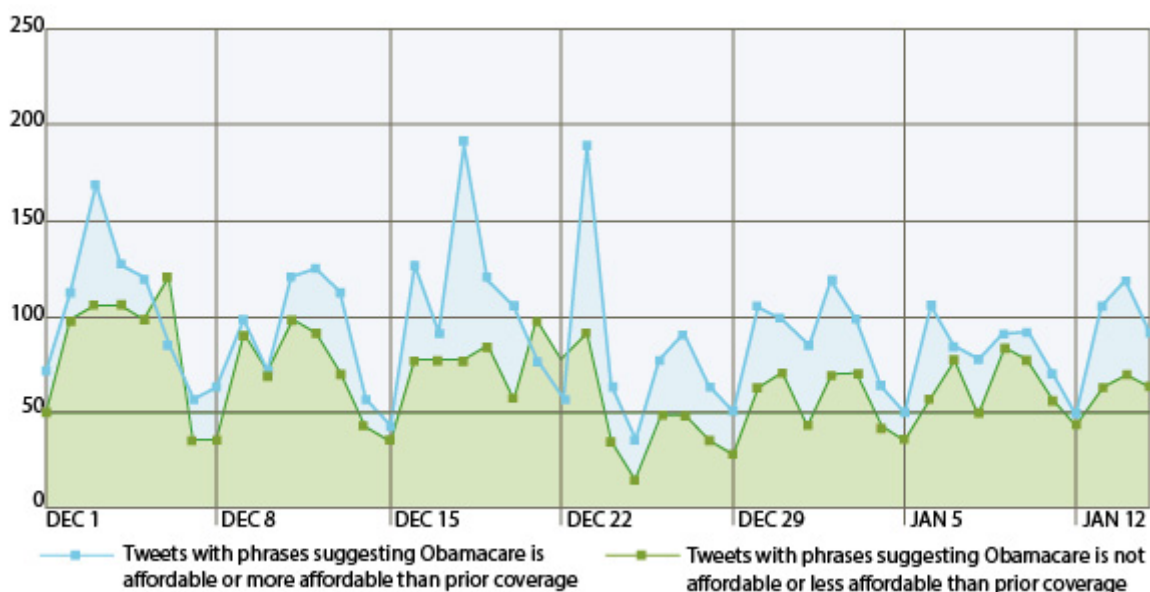
In the above graph, tweets were counted if they included: Obamacare or #obamacare; ACA, #ACA, or "affordable care act"; and HealthCare.gov, site:healthcare.gov, "healthcare dot gov," or @healthcaregov.

**OBSERVATION 2:** Twitter sentiment about HealthCare.gov and state-based marketplaces was more positive in December than it was in November, but sentiment for HealthCare.gov remains less positive than for the state-based marketplaces.

- The average sentiment score of tweets containing a link to HealthCare.gov in December improved by 10 points to 31/100, compared with 23/100 in November.
- The average sentiment score of tweets containing a link to state-based marketplace sites was 61/100 in December, compared with 59/100 in November.



**OBSERVATION 3:** As more people have successfully navigated enrollment portals to sign up for coverage, the Twitter conversation about coverage affordability has increased. A Twitter search designed to capture the consumer voice on this topic revealed a higher volume of positive tweets than negative tweets from December 1, 2013, to January 15, 2014.





In the above graph, tweets were counted if they included phrases such as "went down," "going down," "cost less," "less expensive," and "cheaper"; or "went up," "going up," "cost more," "expensive," and "pay more."

**OBSERVATION 4:** A Twitter conversation among the "young invincible" demographic reveals themes of transitioning to adulthood and becoming more responsible upon signing up for health coverage.

Below, a sample of tweets reveal the nature of the dialogue among young people purchasing health coverage for the first time. These examples are taken from each of the four months since the launch of Obamacare.

<b>tracy harris</b> @tftft Got my tires rotated and did health insurance enrollment today. #grownup	7 Oct
<b>Taime</b> @taimelizabeth It's so weird to be under my own insurance and not under my parents. Like I'm a real adult now	21 Oct
<b>Lizz Keller</b> @ohnoyoutwiitnt I'm shopping for health insurance right now and this is too grown up for me I need a Capri Sun to cancel this out.	29 Oct
<b>Cody M. Smallwood</b> @csmalls Well, I just signed up for my very own health insurance for the first time... and it doesn't feel so bad to provide for myself! #grownup	19 Nov
<b>Sina Grace</b> @sinagrace And now I have health insurance!!!! Adulthood phase two!!!!	2 Dec
<b>Jamie</b> @jamjamwithans officially an adult - my very own insurance card has just arrived in the mail #grownup	3 Dec
<b>Alisa Sanders</b> @alisasanders So I got my health insurance cards in the mail today. This is adulthood.	10 Jan

## Young Adults on Obamacare

March 18, 2014

Over the first five months of ACA enrollment activity, observers have keenly watched how young adults responded.

This fourth in a series of analyses focuses on the "young invincible" demographic (age 18 to 34 years) and how [Young Invincibles](#), a national advocacy organization, uses Twitter as a tool to get young people to enroll in health coverage.

Enrollment among 18- to 34-year-olds has improved in the last couple of months: as of February 1, 2014, 27% of those enrolled through a marketplace since the launch are between 18 and 34 years old, a 65% increase from December numbers.<sup>(1)</sup> However, enrollment still trails initial expectations, making this demographic an important target for outreach and enrollment, as evidenced by President Obama's March 11 appearance on *Between Two Ferns*, an online comedy series. The president's back-and-forth with host Zach Galifianakis was among the most-trending videos on Twitter in the United States on March 11, with 43,617 retweets or replies to tweets containing the link to the video and over 207 million potential impressions. The video was the number one source of referrals to the HealthCare.gov enrollment site.<sup>(2)</sup>

CHCF and Young Invincibles collaborated on the statistics and findings presented below. Because Twitter does not readily or reliably provide individuals' demographic information (such as gender, age, and location), the tweets cited below are examples mined manually to illustrate the kinds of conversations taking place among 18- to 34-year-olds.

**OBSERVATION 1:** Many young adults lack insurance but know they need it.

Nationally 28 million people between the ages of 18 and 34 do not have health insurance.<sup>(3)</sup> Black and Latino young adults are disproportionately affected; in this age range, 31% of Blacks and 47% of Latinos are uninsured.<sup>(4)</sup>

Contrary to common opinion, young adults typically do not forgo health coverage because they deem it unnecessary. Some 35% of young adults cited high costs as their reason for not purchasing medical insurance, as opposed to just over 10% who believed they did not need it.<sup>(5)</sup> The Twitter conversation reflects this concern about cost.

<b>Christian Orozco</b> @christizano Sorry government I'm not buying health insurance this year. Too expensive I'll take that penalty instead.	19 Dec
<b>Delaney</b> @laneylou89 Seriously my health insurance just went up to \$224, fml I can't afford that nonsense	1 Feb
<b>Dan Muller</b> @danmewler I can't afford health insurance, but I can afford @WhiteCastle	17 Feb
<b>#NOCHILLPHIL</b> @windycityrager I'm really sick of my dad badgering me about health insurance. I can't afford it with the cash I make. Why don't you get that?!	21 Jan
<b>@baba_bell</b> kae I'm an unemployed college graduate. I can't afford health insurance by the first.	23 Dec

**OBSERVATION 2:** Financial assistance is a common theme of young adults' tweets about Obamacare.

Young adults are more likely than older applicants to be poor and thus eligible for financial assistance in the form of premium tax credits — or eligible for no-cost Medicaid coverage. Nearly half of young adults eligible for Obamacare could get coverage for \$50 or less per month.<sup>(6)</sup> Some 13.7 million uninsured 18- to 34-year-olds are eligible for tax credits or Medicaid. If all states had taken advantage of the Medicaid expansion option, 18 million would qualify for free or low-cost coverage.<sup>(7)</sup>

<b>Terrance Jay</b> @_terrancejay 156\$/month for health insurance is far more better than not being covered & paying a penalty. I will utilize every benefit in my favor.	20 Dec
<b>Young Bowel Movement</b> @sjonesiproduce Oh shoot! Looks like id only have to pay \$60 a month for insurance under #ObamaCare OR, I can not pay & get fined \$120 at the end of the yr.	30 Jan
<b>Amanda Jo</b> @a17j24a Benefits to being broke as a joke- if i have to sign up for obamacare come March, my monthly pay after the tax credit will be \$0-\$10.	13 Jan
<b>beautiful_sweetheart</b> @mz_bossette89 Finally got some health insurance and it was free yeeeeee	13 Feb
<b>Michael Nicks</b> @myarr My best friend just got health insurance for \$21/month thanks to the ACA. Someone tell me again why this is such a bad thing? #tcot	11 Feb

**OBSERVATION 3:** Not all young adults are healthy, much less invincible. Some of those with pre-existing conditions tweet about getting coverage because of Obamacare.

Among those age 18 to 24, nearly 20% have a significant diagnosed pre-existing condition. The percentage rises to nearly 25% for adults age 25 to 34.(8)

The tweets below from 18- to 30-year-olds illustrate the issues they've had around pre-existing conditions.

<b>Robyn Swirling</b> @rswirling Just enrolled my pre-existing-condition-having lady self in some #Obamacare. #ThanksObama!	8 Feb
<b>Tony Webster</b> @webster Good riddance to the phrase 'pre-existing condition.' Cheers to friends FINALLY now being treated as humans. Thanks ACA! <a href="#">#last2013tweet</a>	31 Dec
<b>Lucas Muller</b> @lucaswmuller I'm 26, have type 1 diabetes, & thanks to the Affordable Care Act I'm able to both have insurance & not die. Thanks <a href="#">@BarackObama</a> <a href="#">#Obamacare</a>	23 Dec
<b>Kim Lofgren</b> @kimberlofgren Shopping for a healthcare plan for the first time. Haven't had insurance since I was booted off my parents' plan at 5 for asthma. <a href="#">#Obamacare</a>	23 Dec
<b>Whitney Oliver</b> @whitneyeliver Signed up for health insurance thanks to #Obamacare! Before I was denied coverage by EVERY company in NC due to a pre-existing condition.	22 Dec

**OBSERVATION 4:** National Youth Enrollment Day used Twitter, Instagram, and celebrities to promote coverage.

February 15, 2014, was the country's first National Youth Enrollment Day and included over 100 education and enrollment events across the country. A lead organizer of the event, Young Invincibles, used Twitter to promote and track activities before, during, and after the event.

Young Invincibles heavily promoted the use of #GetCovered and turned to Twitter to track its impact and to carry out the following activities:

- During National Youth Enrollment Day, Young Invincibles tracked the use of #GetCovered in real time. Using the Topsy discovery feature, they were able to see which hashtags were used in association with #GetCovered, analyze progress, and use relevant, trending hashtags to keep up with the conversation.

The most relevant hashtags associated with #GetCovered on February 14 and February 15 were #Obamacare, #valentinesday, #acavalentines, #oursalud, and #happyvalentinesday.

The potential exposure (people who could have viewed tweets with #GetCovered) during the week leading up to February 15 was 619,739,332 people; February 14 and 15 accounted for nearly 70% of the overall potential exposure.

- Young Invincibles also used Twitter to identify celebrities whose #GetCovered tweets had the most influence, and then tried to leverage their reach in promoting various activities.

Celebrities with the most followers who tweeted #GetCovered on February 15 were Eva Longoria, Sarah Silverman, Nina Dobrev, Russell Simmons, Pharrell Williams, and Mindy Kaling.

- Young Invincibles tracked Instagram to identify people who tweeted links to their Instagram photos with the hashtag #GetCovered, as in the example below.



## Sources

1. US Dept. of Health & Human Services, [Health Insurance Marketplace: March Enrollment Report](#), 3/11/2014.
2. The Washington Post, ["Zach Galifianakis Is Now HealthCare.gov's Biggest Traffic Driver,"](#) 3/11/2014.
- 3., 4. Young Invincibles, [Who Needs Health Care Coverage in the USA?](#), August 2013.
5. Young Invincibles, [Young Invincibles: What's in a Name?](#), September 2013.
6. US Dept. of Health & Human Services, [Nearly 5 in 10 Uninsured Single Young Adults Eligible for the Health Insurance Marketplace Could Pay \\$50 or Less per Month for Coverage in 2014](#), 10/28/2013.
7. Young Invincibles, [Who Needs Health Care Coverage in the USA?](#), August 2013.
8. Families USA, [Worry No More: Americans with Pre-Existing Conditions Are Protected by the Health Care Law](#), July 2012.



## Twitter Reacts to Final Phase of First ACA Open Enrollment

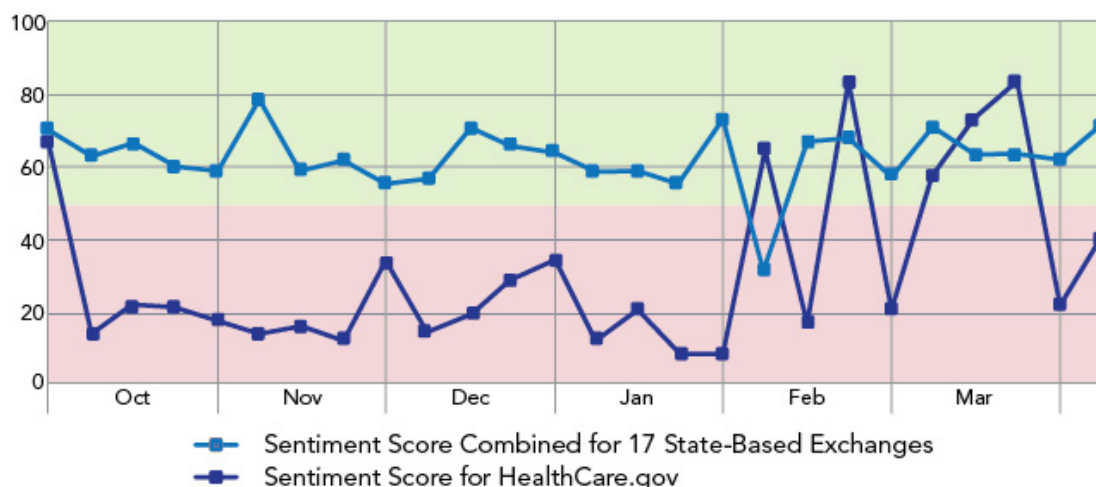
April 28, 2014

As the first Affordable Care Act open-enrollment period wound down, the Twitter conversation touched on the March 31 enrollment deadline, relief over getting coverage, and frustration with accessing health care services.

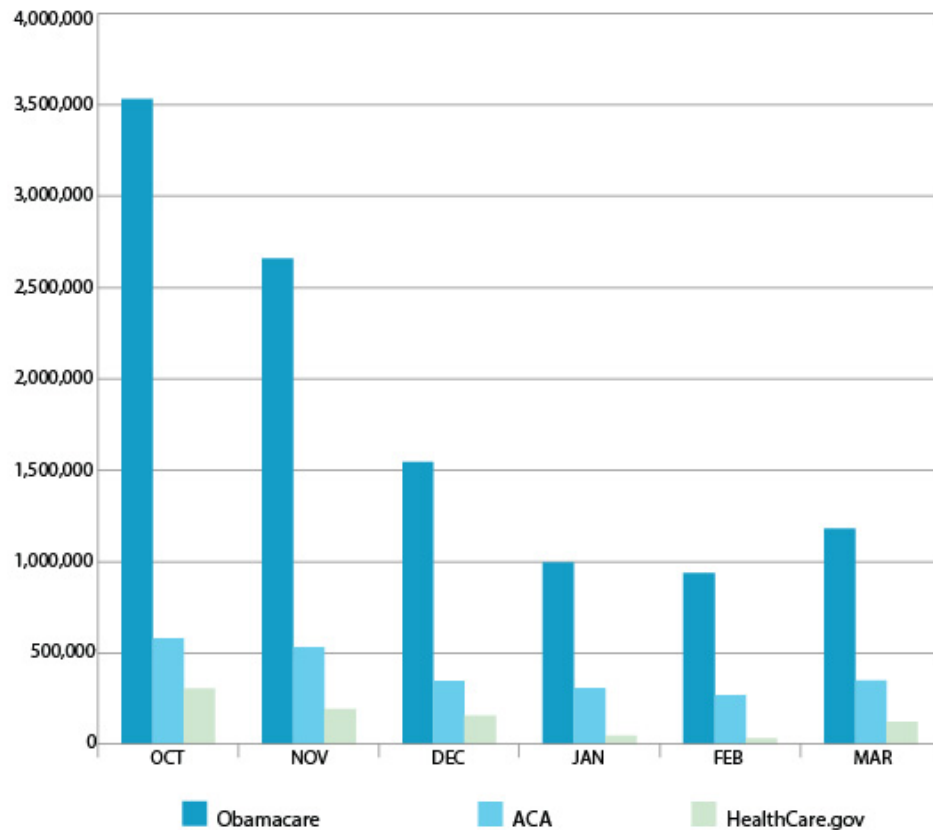
This fifth and final analysis of Twitter activity during the first ACA open-enrollment period describes several trends since the Obamacare launch in October 2013 and provides a more recent snapshot of the Twitter dialogue.

This analysis examines volume of tweets, spikes in activity, and sentiment trending. The Topsy sentiment score uses advanced natural language processing to analyze the sentiment — positive or negative — of each tweet compared to the sentiment of everything else being discussed on Twitter. Each tweet is assigned a score from 0 to 100, with 50 being neutral sentiment and higher and lower scores representing positive and negative sentiment, respectively.

**OBSERVATION 1:** Twitter sentiment scores for state-based marketplaces were higher overall than those for HealthCare.gov throughout the first open enrollment period. Sentiment for HealthCare.gov did spike into positive sentiment territory occasionally in the last three months before the March 31 deadline. The graph below compares sentiment scores for the 17 state-based marketplaces combined versus HealthCare.gov.



**OBSERVATION 2:** The volume of tweets about Obamacare waned during the six-month open-enrollment period but increased slightly from February to March as the open-enrollment deadline neared.



In the above graph, tweets were counted if they included: Obamacare or #obamacare; ACA, #ACA, or "affordable care act"; and HealthCare.gov, site:healthcare.gov, "healthcare dot gov," or @healthcaregov.

**OBSERVATION 3:** Twitter is used as a consumer communication tool in health care as in many other arenas. Consumers turn to Twitter to voice both satisfaction and frustration with their insurance coverage and access to care. Twitter is also used as a direct line to customer support, as evidenced below by health plan responses to tweets from dissatisfied consumers.

Example 1:

<b>Kate Jaeger</b> @akahijinx Almost 2hr on the phone, but I now have affordable health insurance... I'll be saving \$345/mo from my current plan! What a blessing!	31 Mar
<b>Max Sidman</b> @maxsidman Had my first appt. as a patient at @kpnorcal today. Fast, friendly, easy. Pretty great for a giant machine. (CC: @KPMemberService)	27 Feb
<b>Princess Uzor</b> @msbadunkudunk Just made a doctor appt with my new HEALTH INSURANCE!!!! *does the jive*	10 Jan
<b>Toni Konz</b> @tkonz After using my new health insurance plan for first time this year today, I'm not a happy camper. I want my old plan back!	15 Jan

Example 2:

<b>Cris Dobrosielski</b> @CrisD_Fitness Once again shocked, disturbed n insulted by @sharphealthcare n @AnthemBlueCross #Deceptive n #Dishonest billing and coding protocol. VERY SAD	25 Mar
<b>SharpHealthCare</b> @sharphealthcare @CrisD_Fitness We're concerned about your tweet, Cris, and would like to help. Please email us at feedback@sharp.com w/ best way to reach you.	25 Mar
<b>Cris Dobrosielski</b> @CrisD_Fitness @sharphealthcare Thank u, More #empathy n #activelisting received from my tweet then on a 15 minute call with billing department. Will do.	25 Mar

Example 3:

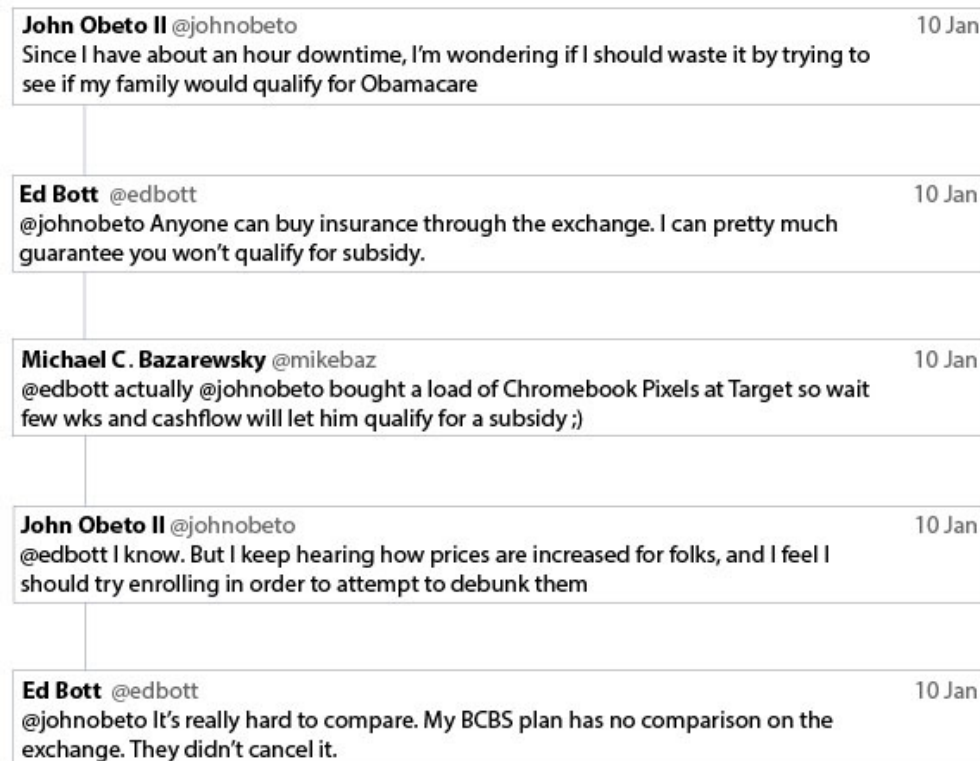
<b>Deepak Gupta</b> @dgupta5150 @healthnet need your help plz. Called yesterday - could not get through and emailed but no word back <a href="#">#Help</a>	11 Mar
<b>Health Net</b> @healthnet @dgupta5150 Could you DM us your contact information and we'll ask one of our Customer Service reps to contact you?	11 Mar
<b>Deepak Gupta</b> @dgupta5150 @healthnet yes	11 Mar
<b>Kate Fuller</b> @DieselandLily @dgupta51502healthnet They don't care.	12 Mar
<b>Deepak Gupta</b> @dgupta5150 @DieselandLily i know lol. someone from the exec office helped me	13 Mar

**OBSERVATION 4:** As the March 31 deadline for enrollment in marketplace plans approached, it became a topic of Twitter conversation, with individuals commenting on penalties, last minute enrollment, and getting in under the wire.

<b>Mackenzie Hunt</b> @mackenziehunt This weekend, I guess I will be trying to get health insurance before the deadline 3/31/14 which is Monday.	28 Mar
<b>Omari Johnson</b> @omariofficial About to fill out my health insurance form before it's too late. I got 3 days. I'm not tryna get fined. lol	28 Mar
<b>Ximena Bouroncle</b> @ximebx3 Like any good procrastinator would, I waited til the last day to get Health Insurance. But, I got it done! <a href="#">#likeaboss</a>	31 Mar
<b>Eddo Kim</b> @eddokim Just signed up for <a href="#">#obamacare</a> and it actually feels good. Kinda like turning a big assignment in at the nick of time.	26 Mar
<b>Edith Ruiz</b> @04e25j91r I need to hop on some cheap health insurance before they give me that penalty	24 Mar

**OBSERVATION 5:** Consumers used Twitter in a "social support" capacity as people sought information and help from their networks related to signing up for health insurance. Below are examples of Twitter conversations about cost, subsidies, and the "metal level" plan choices.

Example 1:



Example 2:

