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**Enrollment Deficits under the  
Affordable Care Act**  
A FOCUS ON NORTH CAROLINA'S RURAL COUNTIES

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# 1 INTRODUCTION

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The Affordable Care Act (ACA) has presented unprecedented opportunities to reduce the number of people without health insurance. Even though North Carolina has not expanded Medicaid for people in poverty, the ACA provides substantial subsidies to people above poverty to purchase coverage through the newly established “marketplace” exchange: [healthcare.gov](http://healthcare.gov).

We are now approaching the third “open enrollment” season under the ACA, during which people can enroll with an insurer regardless of health conditions or family or job situation. During the first two open enrollments North Carolina has been one of the most successful states in enrolling people eligible for marketplace subsidies. However, only about half of people eligible for subsidies so far have enrolled, and this enrollment deficit varies across the state. Therefore, we collected available data to answer two questions: in which NC counties are enrollment deficits the greatest, and what are the socio-economic characteristics of these counties? In particular, we focus on rural counties in keeping with the strategic priorities of the Kate B. Reynolds Charitable Trust.

## 1.1 DATA SOURCES AND CALCULATION

We primarily rely on two sources for our data. The U.S. Census Bureau’s American Communities Survey (ACS) provides county-level data about population, median income, educational attainment, and percentage of the population that is foreign; for most of these measures, it is necessary to average over the five year period 2009-2013.

The Henry J. Kaiser Family Foundation (Kaiser) was the source for our more specialized data on marketplace enrollment and eligibility.<sup>1</sup> Kaiser obtained marketplace enrollment information from the U.S. Department of Health and Human Services’ (DHHS) Consumer Information and Insurance Oversight (CCIIO), as of March 2014 (the end of the previous open enrollment period.) For estimates of population eligible for subsidies, Kaiser used Census data.

Kaiser provides its estimates at the level of Public Use Microdata Areas (PUMAs). PUMAs are population areas used by the Census Bureau, comprised of approximately 100,000 people each. Thus, depending on county size, some counties consist of several PUMAs, but some PUMAs encompass several counties. In order to apply Kaiser’s PUMA level data at the county level, for PUMAs consisting of several counties, we assumed that the PUMA estimates applied uniformly across the constituent counties, in proportion to each county’s population or enrollment.

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<sup>1</sup> <http://kff.org/interactive/mapping-marketplace-enrollment/>.

## 2 ENROLLMENT DEFICITS IN RURAL COUNTIES

As shown in Table 1, North Carolina’s 100 counties divide into 80 that are rural, accounting for 42% of the state’s population, 14 suburban, accounting for 25% of the population, and 6 urban accounting for 33% of the population. Statewide, about half (51%) of people estimated to be eligible for subsidized coverage through the marketplace exchange had enrolled by the end of the 2014 open enrollment period; the other half constitute what we call the “enrollment deficit.”<sup>2</sup> The enrollment percentage/deficit is fairly consistent across these groupings of counties, but the enrollment deficit is about 3 percentage points greater in rural than urban counties. Moreover, because rural counties as a whole are more populous than either urban or suburban, a greater number of unenrolled eligible people live in rural counties (210,855) than in either of the other two types. For these reasons, rural counties merit special attention in considering how best to narrow the enrollment deficit.

**Table 1: Enrollment Deficits and Population Characteristics, by County Type**

	<u>Population</u>	<u>Eligibles</u>	<u>Average Eligibles Enrolled</u>	<u>Enrollment Deficit</u>	<u>Foreign Born</u>	<u>Median Income</u>	<u>Not a High School Graduate</u>
<b>Statewide 100 counties</b>	9,561,558	1,093,768	51.2%	533,758	4.9%	\$41,524	20%
<b>Urban 6 counties</b>	3,143,207 (33%)	395,889	53.3%	184,880 (35% of total)	10.8%	\$52,382	15%
<b>Suburban 14 counties</b>	2,401,612 (25%)	277,010	50.2%	137,951 (26% of total)	6.7%	\$47,409	18%
<b>Rural 80 counties</b>	4,016,739 (42%)	420,869	49.9%	210,855 (39% of total)	4.2%	\$39,679	21%

Note: Figures to the right of the black bar apply to the county as a whole (and not just those enrolled or eligible).

Table 1 shows averages of some key demographic characteristics that might affect enrollment efforts in different types of counties. Income and education levels are noticeably lower in rural than in urban or suburban counties. Enrolling in the marketplace is not a simple process to understand or to accomplish. Those with lower education may find it more difficult to complete this process. Also, those with lower income may face

<sup>2</sup> The enrollment percentage represents the percent of eligibles enrolled, and the enrollment deficit is the number (or percentage) of eligibles not enrolled.

more transportation difficulty in meeting with an insurance agent or enrollment assister, especially those living in areas that lack public transportation.

Another potential difficulty is language or cultural barriers among foreign-born residents. Many foreign-born residents are citizens and so are potentially eligible, but so too are noncitizen legal immigrants. We lack precise measures of these categories of immigrants, but the proportion of the population born outside the country is a reasonable proxy for where eligible immigrant groups are clustered. Table 1 shows that, on the whole, rural counties have a lower concentration of foreign-born residents (4.2%) than do urban (10.8%) or suburban (6.7%) counties. However, as shown in Table 4 in the Appendix, this low concentration is hardly uniform – ranging from less than one percent to over ten percent among rural counties. Moreover, low concentration can also present special difficulties, where this indicates the absence of an identified immigrant community with developed social resources and institutions that can provide the more specialized enrollment assistance required.

### **3 FACTORS ASSOCIATED WITH RURAL ENROLLMENT DEFICITS**

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Appendix Table 4 also reveals a substantial variation among rural counties in the size of their enrollment deficits. Although the rural enrollment average is within one percentage point of the statewide average, the enrollment deficit ranges from almost two-thirds of those eligible for marketplace subsidies in some rural counties, to less than one third in other rural counties. To better understand the situation in these different groupings of rural counties, Table 2 shows group averages for the 31 rural counties whose enrollment gap is better than average, the 44 counties where the gap is 2% below average, the 27 counties that are 5% below average, and the five counties that are 10% below average. Table 3 gives further breakdown for the latter group, showing population characteristics for each of the five counties where the enrollment deficit exceeds 60 percent.

Tables 2 and 3 show that enrollment deficits among rural counties are associated with several, but not all, of the demographic factors one might expect. Notably, lower enrollment is not strongly associated with county size. Differences in average county population are not great among the groupings shown (Table 2), and the differences that exist contradict the notion that enrollment is more difficult in less populous counties. This is further confirmed by Table 3, where county size ranges from 10,000 to over 1000,000.

**ENROLLMENT DEFICITS IN RURAL NC COUNTIES**

**Table 2: Rural Population Characteristics by Extent of Enrollment Deficit**

<u>Rural Enrollment Deficit</u>	<u>Average County Population</u>	<u>Total Eligible</u>	<u>Foreign Born</u>	<u>Uninsured Rate, 2013</u>	<u>Median Income</u>	<u>Not a High School Graduate</u>
Counties Better than Average (31)	49,720	160,886	3.9%	21%	38,315	20%
Counties 2% Below Average (44)	51,412	245,070	4.5%	20%	\$40,542	20%
Counties 5% Below Average (27)	62,938	178,195	5.4%	20%	\$39,811	21%
Counties 10% Below Average (5)	62,953	34,137	7.2%	23%	\$36,929	22%

**Table 3: Characteristics of Five Rural Counties with Greatest Enrollment Deficits**

	<u>Total Population</u>	<u>Total Eligible</u>	<u>Foreign Born</u>	<u>Uninsured Rate</u>	<u>Median Income</u>	<u>Not a High School Graduate</u>
<b>Sampson County</b>	63,540	7,703	9.0%	23%	\$36,496	22%
<b>Duplin County</b>	58,728	6,688	12.5%	26%	\$34,433	24%
<b>Wayne County</b>	122,907	11,354	6.80	20%	\$41,731	20%
<b>Lenoir County</b>	59,439	6,877	3.5%	21%	\$35,770	25%
<b>Jones County</b>	10,153	1,516	4.1%	21%	\$36,213	19%

More telling is population percentage that is foreign born. Table 2 shows a distinct gradient in concentration of foreign-born population associated with larger enrollment deficits – suggesting that language and cultural barriers are an issue.

Other socio-demographic factors align as expected with enrollment deficits only for the rural counties with enrollment deficits that are 10 percent greater than the average. For that group of five counties, we see that income and education are lower than in the other groupings. Also, the percentage of people uninsured just prior to the Affordable Care Act taking effect was somewhat higher in those five counties. Otherwise, it appears from these data that the other groupings of rural counties face similar socio-economic challenges, on average.

Table 4 in the Appendix provides similar detail about each of the state's 80 rural counties, in order to help evaluate where it might be most beneficial to target enrollment assistance, and what the nature of enrollment barriers might be. This Table also indicates which rural counties are served by either a Federally Qualified Health Center (FQHC, also called community health centers), or (as of 2014) by a full service free clinic (one that provides a normal range of primary care services with language interpreters and is open at least 20 hours or 4 days a week). These are “safety net” institutions serving uninsured people, many of whom are likely to be eligible. Therefore, they have been, and can be, effective locations for enrollment outreach and assistance. In counties that lack these safety net institutions, other social service agencies or outreach strategies should be considered.

**ENROLLMENT DEFICITS IN RURAL NC COUNTIES**

**APPENDIX**

**Table 4: Enrollment Deficits and Population Characteristics in Rural NC Counties**

<u>County</u>	<u>Population (2010)</u>	<u>Enrolled</u>	<u>Eligible for Subsidies</u>	<u>% of Eligibles Enrolled</u>	<u>Foreign Born</u>	<u>Uninsured (2013)</u>	<u>Median Income</u>	<u>Not a High School Graduate</u>	<u>Served by FQHC</u>	<u>Full Service Free Clinic</u>
Jones	10,153	528	1,516	34.8%	4.1%	22%	\$36,213	19%	Yes	Yes
Lenoir	59,439	2,396	6,877	34.8%	3.5%	20%	\$35,770	25%	Yes	
Wayne	122,907	4,326	11,354	38.1%	6.8%	20%	\$41,731	20%	Yes	Yes
Duplin	58,728	2,608	6,688	39.0%	12.5%	28%	\$34,433	24%	Yes	
Sampson	63,540	3,004	7,703	39.0%	9.0%	24%	\$36,496	22%	Yes	
Greene	21,384	905	2,150	42.1%	7.5%	24%	\$40,853	23%	Yes	
Wilson	81,359	4,098	9,735	42.1%	7.1%	22%	\$39,204	27%	Yes	
Chatham	63,821	3,729	8,776	42.5%	10.6%	20%	\$57,091	24%	Yes	
Lee	57,951	2,767	6,512	42.5%	11.7%	22%	\$44,819	22%		
Craven	103,908	4,516	10,601	42.6%	4.7%	18%	\$47,141	14%	Yes	
Hoke	47,466	2,110	4,856	43.5%	5.3%	22%	\$45,489	25%	Yes	
Richmond	46,659	1,885	4,338	43.5%	4.2%	22%	\$32,384	31%		
Scotland	36,100	1,564	3,599	43.5%	2.0%	19%	\$29,592	25%	Yes	
Onslow	179,471	5,887	13,502	43.6%	4.5%	16%	\$45,450	9%	Yes	
Davie	41,321	2,201	4,985	44.2%	4.1%	18%	\$50,139	19%		Yes
Yadkin	38,425	1,859	4,210	44.2%	6.0%	21%	\$40,371	20%		Yes
Alexander	37,239	2,180	4,893	44.6%	2.4%	20%	\$40,637	16%		
Caldwell	82,998	4,305	9,662	44.6%	2.7%	19%	\$34,357	22%	Yes	Yes
Montgomery	27,826	1,081	2,422	44.6%	8.6%	23%	\$31,830	23%	Yes	
Moore	88,569	5,137	11,509	44.6%	5.5%	19%	\$49,544	20%		Yes
Edgecombe	56,539	2,503	5,489	45.6%	2.4%	19%	\$33,960	23%	Yes	
Nash	95,938	4,732	10,378	45.6%	4.8%	18%	\$43,084	24%	Yes	

**ENROLLMENT DEFICITS IN RURAL NC COUNTIES**

<u>County</u>	<u>Population (2010)</u>	<u>Enrolled</u>	<u>Eligible for Subsidies</u>	<u>% of Eligibles Enrolled</u>	<u>Foreign Born</u>	<u>Uninsured (2013)</u>	<u>Median Income</u>	<u>Not a High School Graduate</u>	<u>Served by FQHC</u>	<u>Full Service Free Clinic</u>
Halifax	54,562	2,453	5,370	45.7%	1.8%	19%	\$32,329	29%	Yes	
Hertford	24,643	842	1,843	45.7%	3.9%	19%	\$33,406	19%	Yes	
Northampton	22,040	743	1,627	45.7%	1.1%	17%	\$31,433	18%	Yes	
Stanly	60,595	3,141	6,866	45.7%	2.9%	19%	\$42,518	19%		
Harnett	115,733	4,918	10,734	45.8%	5.9%	20%	\$44,625	16%	Yes	
Graham	8,875	472	1,027	45.9%	1.8%	25%	\$33,903	24%	Yes	Yes
Haywood	58,935	3,624	7,888	45.9%	2.7%	19%	\$41,557	24%	Yes	
Madison	33,938	1,517	3,302	45.9%	2.1%	20%	\$37,892	19%	Yes	
Swain	13,988	817	1,778	45.9%	2.0%	23%	\$36,094	19%		Yes
Camden	10,003	379	823	46.1%	2.6%	16%	\$56,607	22%		Yes
Chowan	14,759	661	1,435	46.1%	3.4%	18%	\$34,420	20%	Yes	Yes
Currituck	23,643	1,370	2,975	46.1%	3.0%	18%	\$57,159	20%		Yes
Gates	12,207	336	730	46.1%	1.0%	18%	\$46,592	12%	Yes	Yes
Pasquotank	40,733	1,494	3,244	46.1%	3.3%	18%	\$46,053	14%	Yes	
Perquimans	13,495	523	1,136	46.1%	1.7%	18%	\$43,709	22%		Yes
Johnston	169,735	8,695	18,691	46.5%	7.9%	20%	\$49,711	24%	Yes	
Transylvania	33,094	2,366	4,964	47.7%	2.6%	21%	\$41,781	12%	Yes	
Ashe	27,291	1,951	4,048	48.2%	4.1%	23%	\$35,951	26%	Yes	Yes
Avery	17,755	1,421	2,948	48.2%	3.7%	25%	\$36,969	14%	Yes	Yes
Mitchell	15,546	1,144	2,374	48.2%	1.9%	20%	\$37,680	15%	Yes	
Watauga	51,041	3,345	6,940	48.2%	3.5%	20%	\$34,293	2%	Yes	Yes
Yancey	17,794	1,239	2,571	48.2%	3.0%	24%	\$38,579	12%		
Caswell	23,695	1,070	2,156	49.6%	1.5%	19%	\$35,315	25%	Yes	
Granville	60,063	2,572	5,182	49.6%	4.7%	18%	\$49,852	32%		
Person	39,461	2,033	4,096	49.6%	2.7%	18%	\$42,317	22%	Yes	
Jackson	40,338	1,735	3,480	49.9%	4.4%	26%	\$36,951	7%	Yes	



## ENROLLMENT DEFICITS IN RURAL NC COUNTIES

<u>County</u>	<u>Population (2010)</u>	<u>Enrolled</u>	<u>Eligible for Subsidies</u>	<u>% of Eligibles Enrolled</u>	<u>Foreign Born</u>	<u>Uninsured (2013)</u>	<u>Median Income</u>	<u>Not a High School Graduate</u>	<u>Served by FQHC</u>	<u>Full Service Free Clinic</u>
Anson	26,908	1,207	2,364	51.0%	2.7%	18%	\$33,870	25%	Yes	
Brunswick	107,992	7,496	14,345	52.3%	4.1%	20%	\$46,438	18%	Yes	Yes
Warren	20,931	901	1,698	53.1%	2.1%	22%	\$34,285	22%	Yes	
Polk	20,465	1,280	2,406	53.2%	4.2%	22%	\$44,745	15%	Yes	
Rutherford	67,772	3,651	6,863	53.2%	2.6%	20%	\$36,334	28%	Yes	
Cherokee	27,436	1,590	2,957	53.8%	2.4%	22%	\$34,432	16%		Yes
Clay	10,594	711	1,322	53.8%	3.2%	22%	\$38,828	17%		Yes
Macon	45,016	2,557	4,755	53.8%	5.5%	25%	\$35,297	19%	Yes	Yes
Burke	90,771	4,064	7,465	54.4%	5.1%	20%	\$37,263	31%	Yes	Yes
McDowell	24,501	2,250	4,133	54.4%	3.2%	19%	\$35,111	17%		
Randolph	141,960	7,771	14,027	55.4%	6.7%	20%	\$41,208	19%	Yes	Yes
Cleveland	98,050	4,648	8,297	56.0%	2.1%	18%	\$38,989	18%		
Bladen	35,229	1,879	3,341	56.2%	5.0%	22%	\$30,164	29%	Yes	
Columbus	57,994	2,964	5,271	56.2%	2.9%	22%	\$35,761	25%	Yes	Yes
Beaufort	47,820	3,459	5,746	60.2%	4.8%	19%	\$40,429	22%	Yes	
Carteret	66,685	4,613	7,663	60.2%	3.4%	19%	\$46,534	14%		
Pamlico	13,124	727	1,208	60.2%	3.7%	20%	\$43,853	16%	Yes	Yes
Franklin	60,848	3,578	5,917	60.5%	4.6%	20%	\$41,696	23%	Yes	
Vance	45,426	2,362	3,906	60.5%	4.0%	20%	\$34,987	33%	Yes	Yes
Alleghany	11,163	765	1,262	60.6%	5.3%	30%	\$35,170	21%	Yes	
Surry	73,694	3,871	6,387	60.6%	5.5%	22%	\$35,641	22%		
Wilkes	69,287	4,030	6,650	60.6%	3.3%	22%	\$33,159	24%		Yes
Robeson	134,473	9,883	15,710	62.9%	5.6%	27%	\$29,806	26%	Yes	
Pender	52,433	3,486	5,466	63.8%	3.7%	22%	\$44,524	28%	Yes	Yes
Bertie	21,250	816	1,208	67.5%	0.8%	18%	\$30,768	33%	Yes	
Dare	34,015	3,785	5,605	67.5%	5.5%	22%	\$55,481	26%		Yes

## ENROLLMENT DEFICITS IN RURAL NC COUNTIES

<u>County</u>	<u>Population (2010)</u>	<u>Enrolled</u>	<u>Eligible for Subsidies</u>	<u>% of Eligibles Enrolled</u>		<u>Foreign Born</u>	<u>Uninsured (2013)</u>	<u>Median Income</u>	<u>Not a High School Graduate</u>	<u>Served by FQHC</u>	<u>Full Service Free Clinic</u>
Hyde	5,807	363	538	67.5%		5.4%	24%	\$42,279	36%	Yes	
Martin	20,777	1,419	2,101	67.5%		2.0%	19%	\$38,598	15%	Yes	
Tyrrell	4,417	339	502	67.5%		6.8%	27%	\$34,216	17%		
Washington	13,206	777	1,151	67.5%		2.7%	19%	\$34,936	35%		
Rockingham	93,641	5,391	7,407	72.8%		3.8%	19%	\$38,567	23%	Yes	Yes
Stokes	47,351	2,341	3,216	72.8%		1.4%	17%	\$42,703	24%		Yes

Notes: Figures to the right of the black bar apply to the county population as a whole (and not just those enrolled or eligible).

Information regarding free clinics is based on 2014 data, and clinic service areas may have changed since then.