As has been described elsewhere in this issue of the NCMJ [1], the Patient Protection and Affordable Care Act of 2010 (ACA) contains provisions for 2 major programs to expand eligibility for health insurance among low-income and moderate-income individuals: the expansion of Medicaid to include individuals with incomes up to 138% of the federal poverty level (FPL) [2]; and the availability of sliding-scale subsidies through the health insurance marketplaces (also known as health benefit exchanges) for certain individuals with incomes between 100% and 400% of the FPL [3]. Numerous measures have been used to estimate the number of people who would be eligible nationally [4], and some state-level estimates have been developed [5], but outreach and enrollment efforts will likely be performed at the local level using community resources. Thus an understanding of the number of local individuals who are potentially eligible for these programs is important in order to optimally implement outreach and enrollment efforts.

The US Census Bureau, through the Small Area Health Insurance Estimate (SAHIE) program, has developed local area (ie, county) estimates of the number of uninsured individuals in specific age and income categories by combining US Census Bureau data (American Community Survey and County Business Patterns), demographic data (eg, data from the US Census 2010), and program administration data (eg, data from aggregated federal tax returns and from participation records for the Supplemental Nutrition Assistance Program, Medicaid, and the Children’s Health Insurance Program) [6]. These synthetic estimates are based on triangulating multiple data sources to develop estimates at the local level, where even existing surveys that gather county-level data (eg, the Behavioral Risk Factor Surveillance System surveys) have sample sizes too small to yield reliable results. This method is similar to other processes for developing small area estimates [7]; interested readers may refer to the methodology section of the SAHIE website for more details [6].

This analysis presents estimates that are relevant for the above-mentioned ACA programs. It is important to note that the estimates presented here are for potential eligibility, not for enrollment. It has been well documented that insurance programs rarely enroll 100% of eligible individuals [8, 9]; however, the individual mandate included in the ACA should provide an incentive for people to enroll. It is also important to note that additional eligibility criteria are not incorporated into the SAHIE estimates (notably, the criterion that an individual must either be a US citizen or have been a resident of the United States for at least 5 years), so the presented rates are overestimates. Furthermore, SAHIE provides estimates for specific income cut points; as stated previously, 100% of the FPL is an important cut point, but it is not included in the list of available SAHIE queries. For this analysis, we use previously published estimates [10] that 183,000/ (183,000 + 355,000) or 34.0% of uninsured adults under 138% of the FPL have incomes between 100% and 138% of the FPL. Finally, the SAHIE interactive tool allows age groups of less than 19 years, and 18–64 years, both of which include individuals aged 18 years. For these data, estimates for adults were adjusted to account for “double-counting” of enrollment.
18-year-old individuals.

For the Medicaid expansion included in the ACA, individuals would be eligible if they have income below 138% of the FPL. Currently, for children to be eligible for North Carolina Medicaid or North Carolina Health Choice, they must live in households with an income of no more than 200% of the FPL; thus the expansion of Medicaid under the ACA would have no effect on children’s eligibility. However, the so-called “woodwork effect” may encourage parents to enroll currently uninsured, though potentially eligible, children in Medicaid. Because North Carolina has decided not to expand Medicaid, some of the adults who would have potentially been eligible for Medicaid under the expansion—those with incomes between 100% and 138% of the FPL—will instead be eligible for subsidies through the health insurance marketplace and are thus included in that group. For the health insurance marketplace subsidy, adults are eligible if they have an income between 100% and 400% of the FPL, and children are eligible if they live in a household with an income between 200% and 400% of the FPL. Table 1 shows the estimated numbers of uninsured North Carolinians with incomes in these various ranges.

Figure 1 contains 3 maps of North Carolina. Map A shows the percentage of the population, by county, who are currently uninsured. Map B shows the percentage of the population estimated to be children who are uninsured and currently eligible for Medicaid; the northwestern and western counties and the noncoastal counties east of Interstate 95 should expect a larger proportion (up to 3.1%) of their population to be children currently eligible for Medicaid. Map C shows similar patterns overall, with up to 16.6% of the population eligible for subsidies in some counties.

However, it is important to remember that these percentages convey only one piece of the problem; the estimated magnitude will also be an important consideration. Figure 2 shows the estimated numbers of individuals who are potentially eligible for the health insurance marketplace subsidy, by county. Unsurprisingly, a large proportion of the individuals who are expected to be eligible live in the largest 15 counties.

Table 1 shows the estimated numbers of uninsured North Carolinians with incomes in these various ranges.

<table>
<thead>
<tr>
<th>Income level (age 0–18 years)</th>
<th>Adults (age 19–64 years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100% FPL</td>
<td>72,813</td>
<td>409,682</td>
</tr>
<tr>
<td>100%–200% FPL</td>
<td>60,382</td>
<td>453,707</td>
</tr>
<tr>
<td>200%–400% FPL</td>
<td>49,766</td>
<td>361,102</td>
</tr>
<tr>
<td>&gt;400% FPL</td>
<td>13,173</td>
<td>129,294</td>
</tr>
<tr>
<td>Total number of uninsured individuals</td>
<td>196,133</td>
<td>1,353,785</td>
</tr>
</tbody>
</table>

Note. FPL, federal poverty level. Key to shading of cells: Lighter grey cells denote eligibility for subsidies in the health insurance marketplace; darker grey cells denote eligibility for Medicaid. Values may not sum to totals due to rounding.

that are considered to be metropolitan (having a core urban area with a population of 50,000 or more) or micropolitan (having an urban core with a population of at least 10,000 but less than 50,000), counties in rural areas have a greater percentage of individuals who are uninsured and potentially eligible for subsidies in the health insurance marketplace. Likewise, the percentage of the nonelderly adult population (individuals 18–64 years of age) who have incomes less than 100% of the
FPL and are currently uninsured is higher in non-metropolitan areas. Thus, if North Carolina decides in the future to expand Medicaid to adults with incomes below 138% of the FPL, nonmetropolitan counties will have a larger percentage of their population benefit. This higher rate of Medicaid coverage (and coverage by public insurance generally) in rural communities has previously been demonstrated nationally [11]; North Carolina is no exception. NCMJ
Mark Holmes, PhD associate professor, Department of Health Policy and Management, Gillings School of Global Public Health, and director, North Carolina Rural Health Research Program, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

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