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# ACCESS TO QUALITY HEALTH SERVICES IN RURAL AREAS—INSURANCE: A LITERATURE REVIEW

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## SCOPE OF PROBLEM

- Serious concerns exist about both the number and increasing rates of Americans without health insurance.<sup>44</sup> Those without health insurance under age 65 total 41.2 million, according to estimates using U.S. Census data.<sup>10</sup> If the uninsured population continues to increase at the current rate (0.4 percentage increase between 2001 and 2002), 46 million working-age Americans will be uninsured by 2005.<sup>11</sup>
- Persons living in nonmetropolitan areas are more likely to be uninsured than those in metropolitan areas—20 percent versus 17 percent.<sup>1</sup> More detailed comparisons show that the percentage of persons under 65 who are uninsured is higher in rural areas and large central metropolitan counties than in fringe counties in large metropolitan areas or in small metropolitan counties.<sup>9</sup>
- Access to health insurance has been identified by both national and state experts as a rural health priority,<sup>32</sup> and access to quality health services was most frequently selected as a rural health priority in a survey of state and local rural health leaders.<sup>8</sup>
- African Americans and especially Hispanics are more likely than whites to be uninsured.<sup>10, 33</sup> Uninsured rates are also higher among the poor and chronically ill.<sup>2, 34</sup>
- Lack of health insurance is a critical factor in influencing timely access to health care. Persons without health insurance are less likely to have a “regular” or usual health provider, less likely to obtain preventive care, or to obtain needed tests and prescriptions.<sup>35, 36</sup> The Department of Health and Human Services interagency workgroup has identified health insurance as one of the 10 “leading health indicators” and generally a reliable predictor of overall health status.<sup>37, 38</sup>

## GOALS AND OBJECTIVES

The goal of Healthy People 2010’s access to quality health services focus area is to improve access to comprehensive, high-quality health care service.<sup>1</sup> Access to health insurance is critical to achieving this goal and the related Healthy People 2010 objectives:

- 1-1. Increase the proportion of persons with health insurance.
- 1-2. Increase the proportion of insured persons with coverage for clinical preventive services.

Access to affordable health insurance matters, especially for the medically vulnerable and

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underserved. Prior research examining differences in the health status of those who are medically vulnerable (elderly, poor, and uninsured) with their less vulnerable counterparts, demonstrates that health insurance is an important determinant of health and disability status, likelihood of physician use, and overall likelihood of health care treatment.<sup>2</sup> Health insurance is an important determinant of access and utilization of all aspects of health care services and has a strong influence on a person’s health.<sup>3-7</sup> Those who are uninsured are more likely to lack a regular source of care and less likely to use many health services, including critical emergency services, prenatal services, and nursing services.<sup>39</sup> Reduced preventive care and reduced disease screenings are also associated with uninsured status.<sup>18, 40</sup> Lack of financial resources or health insurance with which to pay for treatment is also a

“key disparity” in blocking access to much needed mental health treatment for persons with mental illness.<sup>41, 42</sup>

**IDENTIFIED BY PEOPLE LIVING IN RURAL AREAS AS A HIGH PRIORITY HEALTH ISSUE FOR THEM**

According to a survey conducted by the Rural Healthy People 2010 team, access to quality health services (which includes access to insurance) was most frequently identified as a rural health priority. Approximately three-quarters of the respondents named access to quality health services as a priority.<sup>8</sup> It was the most often selected priority among all four types of state and local rural health respondents in the survey and across all four geographic areas. Nine out of 10 leaders of state health organizations nominated access as a priority, while about two-thirds of the public health agencies, rural health centers and clinics, or hospitals did the same—a statistically significant difference among the groups. No significant differences across regions appeared, as access nominations appeared uniformly high across four geographic regions of the country.<sup>43</sup> Moreover, access to health insurance was singled out as a rural health priority by 26 percent of state and national rural health experts reached in a preliminary survey that allowed them to declare rural health priorities in an open-ended fashion.<sup>32</sup>

**PREVALENCE AND DISPARITIES IN RURAL AREAS**

Persons living in nonmetropolitan areas are more likely to be uninsured than those in metropolitan areas—20 percent versus 17 percent.<sup>1</sup> More detailed comparisons show the percentages of persons under 65 who are uninsured are higher in rural areas and large central metropolitan counties than in fringe counties in

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large metropolitan areas or in small metropolitan counties.<sup>9</sup> A 1997 survey focusing on the non-elderly population demonstrates that the percentage of uninsured increases from 14.3 percent in metropolitan counties to 17.5 percent in non-metropolitan counties adjacent to metropolitan areas, and to 21.9 percent in non-metropolitan counties not adjacent to metropolitan counties (see Table 1). Other differences in insurance coverage appear across these urban counties, rural adjacent (to urban), and rural non-adjacent counties. Other private insurance, i.e., individually purchased health insurance, is more prevalent in the rural counties, especially among the rural non-adjacent counties, than in urban counties. Medicaid and other public coverage are more prevalent in the rural non-adjacent counties than in urban counties or rural counties adjacent to urban counties.

**Table 1. Health Insurance Coverage of Non-Elderly across the U.S., 1997.**

	Urban Counties	Rural Counties Adjacent to Urban	Rural Non-Adjacent
Uninsured	14.3%	17.5%	21.9%
Public: Medicaid & Other	11.1%	11.0%	15.5%
Other Private Insurance	04.9%	05.6%	07.6%
Employer-Sponsored Insurance	69.7%	65.9%	55.0%

Adapted from Ormond, et al., 2000.<sup>15</sup>

Serious concerns exist about the number, percentage, and rate of increase of Americans without health insurance.<sup>44</sup> Estimates of the proportion of uninsured Americans range from nearly 14.6 percent<sup>10</sup> to 16 percent, or about one out of six persons under age 65, are uninsured.<sup>12</sup>

Estimates using U.S. Census data show that those without health insurance under age 65 total 41.2 million.<sup>10</sup> This amounts to an increase of 1.4 million

over the 14.2 percent uninsured in the previous year.<sup>10</sup> If this annual increase of 0.4 percentage points between 2000 and 2001 in the percentage of uninsured continues at the same rate, 46 million working-age Americans will be uninsured by 2005.<sup>11</sup> Other projections considering employer coverage—whether through the employee and/or the employee’s working spouse—anticipates declines of as much as 6.7 percentage points between 1997 and 2008 in the percent insured because of workforce changes. These figures could be higher if health insurance premiums increase dramatically, if unemployment rises, or if employees decide against taking the insurance offered.<sup>45</sup>

Among racial and ethnic groups, Hispanics are more likely than other Americans under age 65 to be uninsured (36 percent), and African Americans (21 percent) are more likely than whites (14 percent) to be uninsured. Also, young adults 19-24 years of age are more likely to be uninsured (32 percent) as are those separated from their spouse (33 percent).<sup>12</sup> A total of 8.5 million children, or 11.7 percent of all children, are among the uninsured.<sup>10</sup>

The majority (57 percent) of the uninsured are full-time workers, while 20 percent are part-time workers. Despite Medicaid programs, the highest

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rates of uninsured are still in the poor and near poor—the two lowest—income groups.<sup>13</sup> State-by-state differences in income eligibility standards account in part for

variations within and across regions of the United States.

The rates of the uninsured have increased over two decades. U.S. Department of Labor estimates in 1993 showed that 37 million Americans lacked health insurance, up from 31 million in 1987.<sup>46</sup> If current economic conditions continue or worsen, the 41.2 million uninsured non-elderly for 2001 could reach, as noted earlier, 46 million or more by 2005.<sup>11</sup>

The effect of difficult economic times is amplified in rural areas because businesses tend to be smaller, and health insurance costs are a higher percentage of an employer’s semi-fixed operating costs. The continuing decline of rural employers offering health insurance, combined with lower incomes among rural residents (\$30,057, compared to \$39,381 in metro areas)<sup>21, 47, 48</sup> makes it more difficult for rural families to pay out-of-pocket for health insurance.

### Variation by Region

Several studies report that people living in the South and West have lower rates of private or job-based insurance.<sup>9, 10, 14</sup> The uninsured rates are 12 percent in the Northeast and 10 percent in the Midwest, while the uninsured

rates in the South and West are 16.6 percent and 18.2 percent, respectively.<sup>10</sup>

Some studies of rural health insurance coverage in the

Midwest have not demonstrated significant variation in health insurance coverage in rural and nonrural populations in those populations.<sup>49, 50</sup>

Comer and Mueller<sup>49</sup> explain that the lack of difference between urban and rural uninsured in Nebraska may be due to the great similarity in social composition of urban and rural Nebraska.<sup>51</sup> A more recent study, however, finds rural Nebraskans to experience longer spells without health insurance.<sup>24</sup> A 1994 Minnesota study demonstrates that rural residents are more likely to be uninsured and to be self-employed; they are, also, more likely to earn less and to be older than their urban counterparts.<sup>23</sup> A 1998 study in Washington State found that rural residents experience a slightly higher uninsured rate than urban residents.<sup>25</sup>

**Prior research shows that rural residents tend to have higher rates of private, self-purchased health insurance and are more likely to be uninsured.<sup>21-25</sup>**

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Other studies report that working adults living in rural areas are less likely to be offered health insurance through their jobs, i.e., employer-sponsored insurance programs.<sup>20, 21</sup> Most of this difference is associated with rural dependence on smaller firms and lower wage rates.<sup>21</sup> Prior research shows that rural residents tend to have higher rates of private, self-purchased health insurance and are more likely to be uninsured.<sup>21-25</sup>

Rural areas tend to have smaller businesses, resulting in higher premium costs spread across fewer employees. Combined with higher premiums for such occupations as farming, mining, logging, and fishing, many families may not be able to afford insurance.<sup>26</sup> Although focused principally on 12 metropolitan areas, a study of health insurance coverage by employers observes that small businesses continue to be less likely than larger businesses to offer health insurance in 2001; only 62 percent of firms with three to 49 employees offer insurance in comparison to 97 percent of larger firms that do so. For those continuing to offer coverage, small firms are more likely to respond to premium increases by increasing the employee's share of premiums, increasing co-pays and deductibles, using stricter rules for covering employees and dependents, dropping retiree coverage (if they offered it), reducing services covered, and changing products and/or carriers.<sup>52</sup> Given lower incomes paid to rural workers, increases in the employee's share of health insurance premiums and deductibles and co-payments for services may contribute to lower employee acceptance of the insurance coverage offered.

The fact that some regions and rural areas have higher rates of uninsured persons translates into less access to services. The lack of health insurance predicts lower utilization of health care and preventive services.<sup>16, 17</sup> A study that finds larger percentages of uninsured and lower prevalence of employer-sponsored insurance for non-elderly residents in rural counties than in urban counties, also finds more rural residents than urban ones reporting fair or poor health, no visit to a health

professional in the prior year, and less confidence in getting needed health care services.<sup>15</sup>

### **Variation in Insurance Coverage by Race and Ethnicity**

Racial and ethnic minorities are more likely than white Americans to be uninsured. One study found that 10 percent of white/non-Hispanics were uninsured, while 18.2 percent of Asian/Pacific Islanders, 19 percent of blacks, and 33.2 percent of Hispanics were uninsured for the entire year in 2001.<sup>10</sup> Several other recent studies also point to higher uninsured levels among minority populations.<sup>33, 53, 54</sup>

One of these studies, comparing nationally representative samples of working age adults (18 to 64) for 1997, 1999, and 2001, reports the disparities in insurance noted above across Hispanics and African Americans in comparison to whites. These disparities are multiplied, according to the study, by the fact that only about one-third of Hispanics and African Americans without insurance report having a regular source of care in contrast to one half of whites who report the same. Only 62 percent of Hispanics in comparison to 74 percent of African Americans, and 79 percent of whites report a doctor's visit in the past year. More damaging, these disparities for Hispanics appear to be increasing over time.<sup>33</sup>

In a study in 1998 focusing on adult workers, approximately 39 percent of Hispanic respondents were uninsured. Of the Hispanic workers surveyed, 34 percent said their employer did not offer health insurance, and 11 percent reported they were not eligible for the insurance plan offered by the employer.<sup>55</sup> This rate of uninsurance exists despite the fact that 9 million of the 11 million uninsured Hispanics live in a family with at least one member employed. In contrast to the 64 percent of workers nationally covered by employer-based insurance, only 43 percent of Hispanics have such coverage. Over two-thirds of the uninsured Hispanics reported difficulty in paying medical bills or contact by a collection agency about unpaid medical expenses.<sup>56</sup>

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## **IMPACT OF THE CONDITION ON MORTALITY, MORBIDITY, AND A CONTRIBUTOR TO MANY OTHER HEALTH PROBLEMS**

Because adults with chronic conditions and those in their late middle age are more likely to need care, these groups are especially likely to recognize better health outcomes as a result of health insurance coverage.<sup>57</sup> Thirty percent of working-age people with chronic illnesses live below the poverty level.<sup>4, 58, 59</sup> The general health of persons without insurance is poorer than persons with private insurance.<sup>61</sup> Another study reports that the general health of uninsured who recently lost insurance is only slightly less poor than the overall general health of privately insured. However, those classified as “long-term uninsured” or low-income are also classified as *significantly* less healthy.<sup>61</sup>

A lack of health insurance coverage is associated with lower utilization of preventive services and is associated with reduced preventive care such as cancer screening, and care for congestive heart failure, diabetes, chronic obstructive pulmonary disease (COPD), oral and dental health, and mental health.<sup>16, 17</sup> Health insurance, according to another recent review of research, contributes to adults’ receipt of appropriate preventive, chronic, and acute care services; those lacking health insurance coverage, however, experience greater health decline and die sooner.<sup>57</sup>

Lower rates of preventive service utilization are documented for rural areas, although differences vary by service. For example, differences in mammogram screening may be more attributable to education or income rather than place of residence. Other preventive services are negatively correlated to rural status and to being uninsured.<sup>18</sup> The uninsured are also more likely to be hospitalized for avoidable conditions, such as pneumonia and uncontrolled diabetes, and more likely to be diagnosed for cancer at later stages.<sup>19</sup>

The Institute of Medicine’s (IOM) Commission on Uninsurance concludes that minorities and lower-

income adults, often suffering from poorer health and lack of stable health insurance coverage, find improved health insurance coverage particularly beneficial.<sup>57</sup> Such coverage, the commission concludes, would likely reduce racial and ethnic-related disparities in use of appropriate health care services and reduce similar disparities in morbidity and mortality rates.<sup>57</sup>

## **BARRIERS**

Unavailability of insurance through an employer is often the primary reason working-age Americans are uninsured. In a study of uninsured workers, 59 percent have employers who do not offer health insurance; 21 percent are ineligible for the employees’ health plan, and 20 percent decline the coverage offered by their employer.<sup>27</sup> Budetti and colleagues<sup>55</sup> found that 42 percent of workers with incomes below \$20,000 and 20 percent with incomes between \$20,000 - \$35,000 were either not offered employee health benefits or were ineligible.

Most likely to be uninsured are those working in small firms; those earning less than \$10.00 an hour; those working in retail, construction, or service industries; and those who are single and without children. Although only 20 percent of the overall American workforce is employed in firms with less than 25 employees, workers from these small firms account for 42 percent of the uninsured workers in the country.<sup>27</sup>

Even for those small businesses that do offer insurance plans, employees may have little or no choice among health plans. Since 1988, more employers who offer health insurance tend to offer choices among two or more health plans, the percentage peaking at 67 percent in 1996 and then dropping to 60 percent of employers in 2001. According to this survey of employers, those employers with three to 24 workers who offer health insurance are much less likely to offer such choice and show a similar decline in percentages offering two or more plans, dropping from 11 percent of employers in 1996 to 8 percent in 2001.<sup>62</sup>

Prior research consistently demonstrates a strong nexus between health insurance status, chronic illnesses, and poverty.<sup>2, 4, 34, 63-68</sup> During difficult economic times, food and basic necessities are purchased before health insurance, and health insurance is more likely to be dropped or deferred.<sup>28</sup> Since persons living in rural areas are more likely to have seasonal work and lower incomes, they are the most at-risk group of being both uninsured and living below federal poverty levels.<sup>6, 7, 29</sup> A 1997 national survey reports that the poverty rate (those with income below the federal poverty level) increases with degree of rurality, increasing from 13.8 percent among metropolitan counties to 15.8 percent among counties adjacent to metropolitan areas, and 22.5 percent in counties not adjacent to metropolitan areas.<sup>15</sup>

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### **KNOWN CAUSES OF THE CONDITION OR PROBLEM SO EFFECTIVE INTERVENTIONS OR SOLUTIONS CAN BE IDENTIFIED**

Many factors influence access to health insurance coverage. Since 66.6 percent of non-elderly Americans receive their health insurance through their employer, access to jobs that offer health insurance is very important. Larger businesses are found primarily in suburban and urban areas, while businesses in rural areas tend to be smaller. For small businesses, the fixed cost of providing employees with health insurance can be prohibitively high. Thirty percent of workers in firms with less than 25 employees are uninsured.<sup>53</sup>

Higher poverty rates and overall lower wages in rural areas magnify the problem of a lack of employer-based health insurance coverage or

coverage that is more costly to workers. Sixteen percent of workers are uninsured, but a third of workers earning less than \$20,000 are uninsured.<sup>53</sup>

Although those with chronic diseases may have the greatest need for health insurance, they may be less likely to have it, especially if they are poor. The Kaiser Commission<sup>59</sup> reports that “people with chronic illnesses who are poor or near poor are about three times more likely to be without health insurance than those with higher incomes.” This finding has strong implications for the rural working “near-poor” residents who may not have access to regular income or employer-sponsored insurance.

An Indiana study reports that, based on 1994 data, pre-existing condition exclusions associated with chronic disease are an important contributor to lack of adequate coverage for those with such illnesses. Adequate coverage is reduced by about 10 percentage points among those with chronic illnesses versus those without. The reduction is 25 percentage points among single individuals, with even greater impacts among single individuals working in small firms.<sup>34</sup>

Education is also an important factor in health insurance rates. Those with fewer years of education are more likely to fall into the uninsured category. Figures from the Current Population Survey<sup>69</sup> show that working-aged persons with the highest likelihood of being uninsured in 1997 are those who stopped school at or before eighth grade. Only 55 percent of persons in this category have health insurance. College graduates and those with some graduate school are most likely to be insured (90 to 93 percent ).<sup>69</sup>

### **PROPOSED SOLUTIONS OR INTERVENTIONS THAT ARE FEASIBLE IN RURAL COMMUNITIES**

Providing tax incentives and some regulatory protection for developing MEWAs (Multiple Employer Welfare Associations) or health insurance purchasing cooperatives may be near-term solutions for smaller business organizations and co-ops in some regions of the country. Some groups, however,

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oppose changes along lines that it would grant ERISA status to, or otherwise limit, state oversight of these groups.<sup>70</sup>

Other policy solutions relating to persons who are near poverty but who still do not qualify for Medicaid may include Medicaid extensions and waivers and expansion of the State Children’s Health Insurance Program (SCHIP). Although the 1990s saw significant efforts in these areas, the current economic downturn and state budget shortfalls are likely to restrict these options for addressing the needs of more of the uninsured, at least for the near future.<sup>30</sup>

A number of communities, led principally by provider groups in those communities, have established special health plans or programs for the uninsured. These programs emphasize the provision of key preventive and other primary health services that are often associated with reducing demands upon very expensive emergency room services or acute care facilities where such admissions might be preventable by timely primary care. An analysis of 20 such organized community initiatives focuses on those serving urban areas.<sup>71</sup> A related study offers detailed case studies of five of these initiatives.<sup>72</sup> Some rural initiatives exist, however, such as a few models for practice reported in Volume 1 of this report, that serve rural regions or rural and urban communities. More generally, Ormond and associates<sup>15</sup> suggest that, based on studies in eight states with significant rural populations, the rural health providers are providing a larger share of “safety net” services for the rural uninsured than providers in urban areas are providing for uninsured.

An important step in community efforts to address the problem of the uninsured is the development of reasonably accurate estimates of the number of uninsured locally. A guide has been developed to support the efforts of community groups to arrive at such estimates.<sup>31</sup>

## **COMMUNITY MODELS KNOWN TO WORK**

See the Models for Practice section in Volume 1 for a catalog of models.

## **SUMMARY AND CONCLUSIONS**

Rural populations in the U.S. tend to face a number of barriers and challenges in accessing affordable health insurance; these may be greater for some populations than others. Existing research shows significant differences in access to insurance between rural and non-rural populations and that these differences are amplified for racial and ethnic minorities. The percentages of people who are uninsured increases as one compares metropolitan area counties with nearby rural counties, and then with more remote rural counties—the counties with the most uninsured. Most striking are the higher proportions of uninsured among, especially, Hispanics and African Americans, nationally.

The relatively larger proportions of small businesses and lower-paying jobs in rural areas is reflected in less employer-supported health insurance, fewer choices and less attractive provisions among employer-sponsored plans, and lower ability of workers to purchase higher cost, individual insurance policies. At the same time that poverty and/or chronic conditions are associated with an increased need for care, the same conditions increase the likelihood that such people will be uninsured. The combined effects of all of these factors is to place rural populations in many areas of the country at risk of being uninsured and at risk of failing to find adequate or timely treatment for health conditions.

Although there is evidence of some success in some states in reaching more of the uninsured via extending Medicaid program eligibility and enrolling more previously uninsured children in the State Children’s Health Insurance Programs, current budget cutbacks in most states threaten to reverse this progress. There is evidence, too, of innovative community efforts sponsored by local providers to extend coverage or services to the uninsured. Although providers in many rural areas continue to make major efforts to maintain “safety net” services for the uninsured, it is unclear how long they will be able to maintain the services in the face of growing economic challenges to rural populations and providers.

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