

RUPRI Center for  
Rural Health Policy Analysis

North Carolina Rural Health Research and  
Policy Analysis Center

**Definition of Rural in the Context of MMA Access Standards for  
Prescription Drug Plans**

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When the full benefits of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) become operational in 2006, medications will be more affordable for some Medicare beneficiaries in rural America. However, an important policy question needs investigation: How will the MMA affect access to local pharmacy services? The answer is, in part, a function of the extent to which private prescription drug plans offering the Medicare benefit will incorporate local rural pharmacies into their provider networks. Their actions will be based on market considerations and on the requirements for local access contained in the MMA and regulation, which in turn will be shaped by how “rural” is defined. This paper assesses how the definition of rural affects the potential impact of the specific access standards in the Proposed Rule to implement Title I of the MMA.

The MMA adopted the access standards used by the TRICARE plan that insures the U.S. military and dependents:

- In *urban areas* in any region, at least 90% of beneficiaries, on average, must live within 2 miles of a retail pharmacy.
- In *suburban areas* in any region, at least 90% of beneficiaries, on average, must live within 5 miles of a retail pharmacy.
- In *rural areas* in any region, at least 70% of beneficiaries, on average, must live within 15 miles of a retail pharmacy.

The legislation did not specifically define urban, suburban, or rural. Nor did the legislation delineate service regions. The definition used will establish the number of beneficiaries falling under each level of the access standards for each service region, which could be a single state or a multi-state region. *Thus, the definition of rural in the final rule adopted by the Centers for Medicare and Medicaid Services (CMS) will determine the application of the access standards to rural beneficiaries.*

### **How does the definition of rural in the Proposed Rule differ from other commonly used definitions?**

The Proposed Rule defines rural as any ZIP code with fewer than 1,000 persons per square mile (definition used by TRICARE<sup>1</sup>). As shown in Figure 1, this is an exceptionally expansive definition of rural, and encompasses most of the geographic areas of the United States. There are many ways of defining rural geography. One that is frequently used by CMS, including in other sections of the Proposed Rule, is counties not included in metropolitan statistical areas, as defined by the Office of Management and Budget (OMB). As seen in Figure 2, this definition encompasses much less land area than the TRICARE definition. Figures 3 and 4 show the number of Medicare beneficiaries that would be categorized as residing in rural areas under each definition (TRICARE and OMB). Together, the pie charts and maps illustrate the large difference in both the areas of the United States and numbers of Medicare beneficiaries that are considered rural between the two definitions.

<sup>1</sup> Per Section 1860D-4(b)(1)(C)(ii), “Application of the TRICARE Standards,” the Department of Defense statement of work of solicitation (#MDA906-03-R-002) is the basis of the TRICARE standard. The Proposed Rule uses the definitions of urban, suburban, and rural from that solicitation.

### **How many beneficiaries will be at risk of being excluded from the 15-mile access standard?**

Under the access standards in the MMA, 30% of rural Medicare beneficiaries do not have to be included within 15 miles of a retail pharmacy. Although it may seem counter-intuitive, the more generous the definition of rural, the more beneficiaries are *excluded* from the 15-mile access standard. For example, using the definition of rural in the Proposed Rule (TRICARE), approximately 30 million beneficiaries are defined as living in rural areas, and 7.8 million of them (30%) need not be protected by the proposed access standards.<sup>2</sup> In contrast, if rural were defined as non-metropolitan (according to the OMB definition), only 2.3 million beneficiaries would be excluded from the 15-mile access standard.

### **How does the definition of rural interact with the definition of regions?**

Rural beneficiaries will likely benefit if regions are defined as multi-state, as plans wishing to serve more populated states would also be forced to serve more rural neighboring states. However, the extent to which beneficiaries in the more rural states actually benefit from the access standards depends on the definition of rural. In a multi-state region, the definition of rural in the Proposed Rule creates the possibility that an entire state could be excluded from the access standard. Consider the region of North and South Dakota, Nebraska, and Kansas as an example.<sup>3</sup> In this region, under the TRICARE definition of rural, the entire state of North Dakota could be excluded from the protection of access standards because more than 70% of the beneficiaries designated as rural reside in the other three states.

*While we cannot know with certainty how prescription drug plans will respond to the provisions of the MMA, the possibility exists that a well-intended policy creating an access standard will not, as implemented by this Proposed Rule, assure access by rural beneficiaries to local pharmacies. The implications of that possibility are best understood by considering the number of beneficiaries that would be excluded, and how a reasonable business plan (contracting with chain pharmacies) would exclude rural places.*

One hypothetical example of how a network of participating pharmacies *might be formed*, applying the TRICARE definition of rural to a service region encompassing North Dakota, South Dakota, Nebraska, and Kansas, is provided in Figure 5. A prescription drug plan contracting with the three largest pharmacy chains in three of the four states could provide access to pharmacies within 15 miles of 70% of rural beneficiaries, omitting one state (North Dakota) entirely and large areas of the other three states.

<sup>2</sup> Since data on the number of Medicare beneficiaries residing in each ZIP code were unavailable, these numbers were calculated based on the number of persons aged 65 and older in each ZIP code. The actual number of beneficiaries will vary slightly from our estimates, as we cannot include those younger than 65 who qualify for Medicare and the few over 65 who do not qualify.

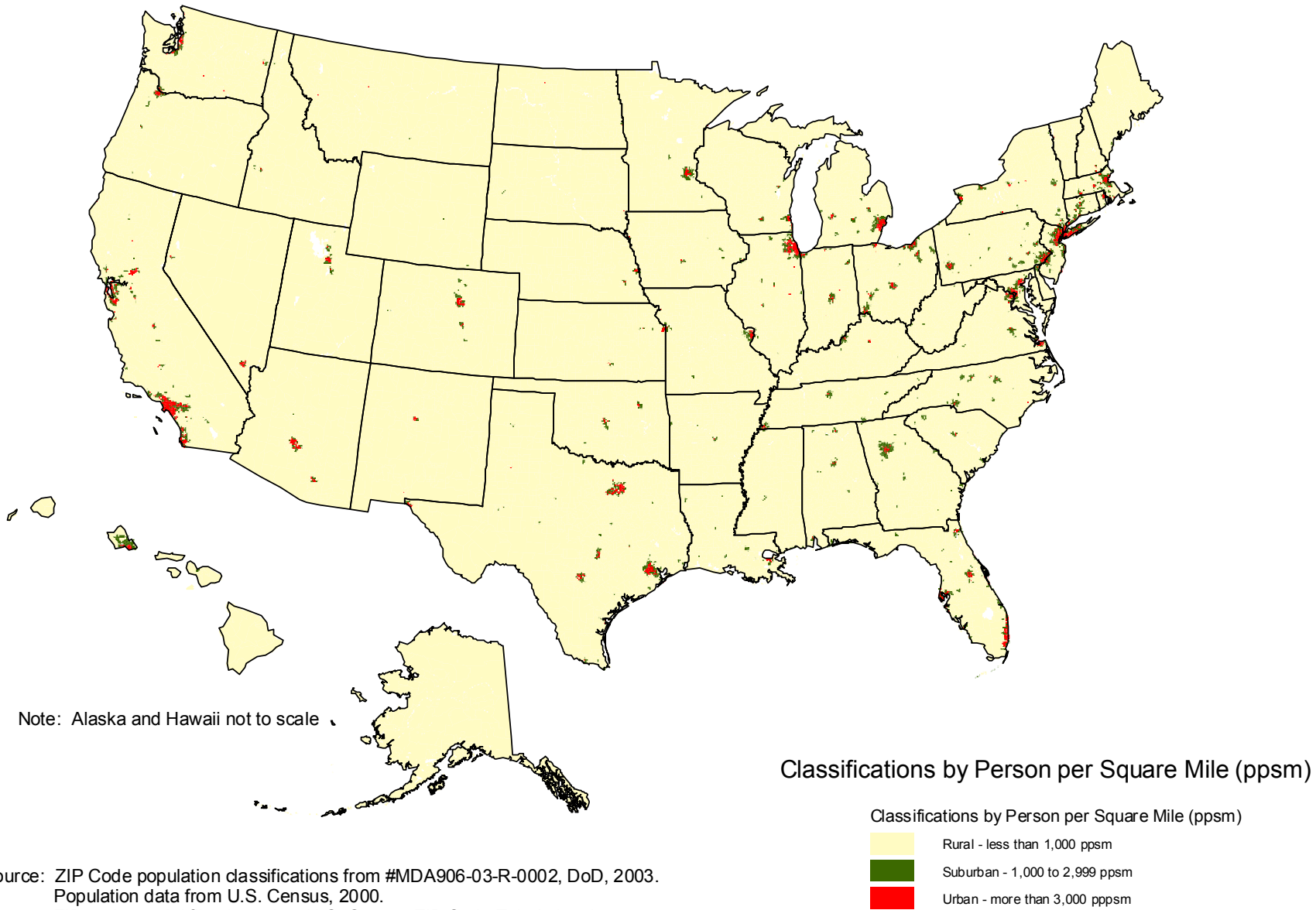
<sup>3</sup> This is one of the regions suggested by analysis completed by the Research Triangle Institute, and presented by the Centers for Medicare & Medicaid Services on July 21, 2004, in an open public meeting in the Rosemont Conference Center, Chicago, Illinois.

**Discussion**

The behavior of Medicare Advantage plans and prescription drug plans after January 1, 2006, is at this time only a matter of speculation. There is no basis on which to forecast how aggressively plans will seek to contract with local pharmacies in rural areas, and whether plans will cease to enter into new contracts when the required 70% of beneficiaries are adequately served. Plans may enter into contracts beyond this point, but will likely do so only to the extent that it is profitable (or, in the case of nonprofit firms, to the extent that it generates an appropriate margin for reserves). The legislative standard is the only assurance that rural beneficiaries will have access to their local pharmacies.

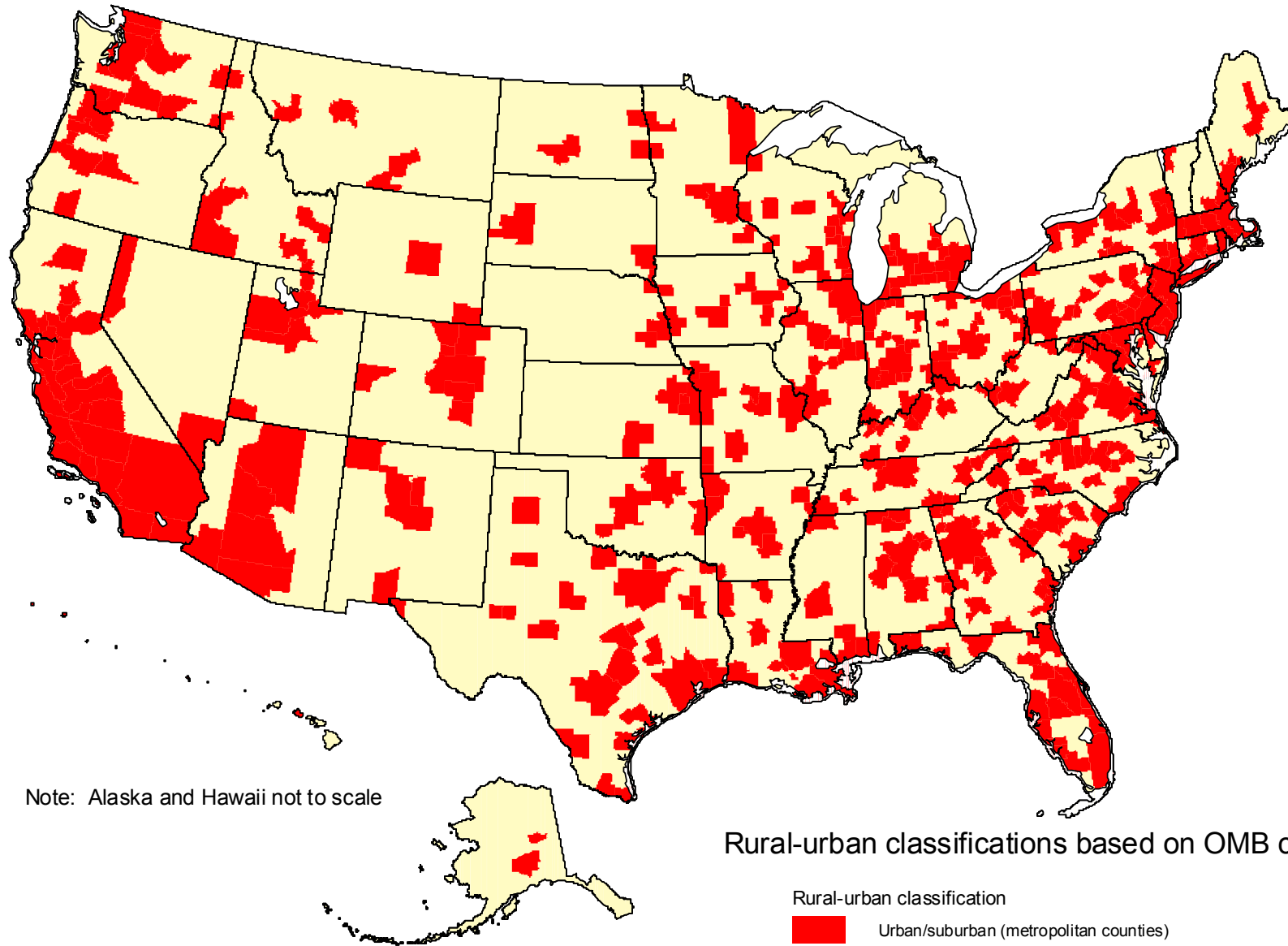
By adopting the TRICARE definition of rural, the Proposed Rule allows the opportunity to exclude more rural beneficiaries from the 15-mile access standard than under any of the definitions of rural currently used by CMS and by other agencies in Health and Human Services. Although for exposition purposes we have only compared the TRICARE definition to OMB's designation of counties as non-metropolitan, there are other ways to define areas as rural that might be useful for the purposes of enacting the MMA. For example, the rural-urban commuting areas (RUCA) codes classify areas based on both geographic proximity and commuting patterns. RUCAs are designed to be flexible in their application and offer the opportunity to designate geographic areas as urban, suburban, and rural as required by the MMA, consistent with commonly used definitions of rural. The congressional objective to achieve convenient access to pharmacies (other than mail order) would be more fully realized if the Proposed Rule definition of rural is changed.

**Figure 1: Rural Areas as Defined by the TRICARE Retail Pharmacy Program**



Source: ZIP Code population classifications from #MDA906-03-R-0002, DoD, 2003.  
Population data from U.S. Census, 2000.  
ZIP code spatial files based on U.S. Census ZIP Code Tabulation Areas, 2000.  
Cartography: RUPRI Center for Rural Health Policy Analysis, 2004.

**Figure 2: Rural Areas as Defined Using the Office of Management and Budget (OMB) Category of Nonmetropolitan, 2003**



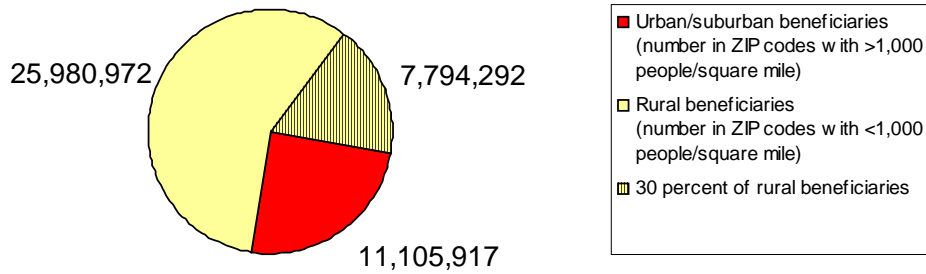
Note: Alaska and Hawaii not to scale

Rural-urban classifications based on OMB categories

- Rural-urban classification
- Urban/suburban (metropolitan counties)
  - Rural (micropolitan and non-core based statistical area counties)

Source: U.S. Census Bureau, Census 2000 and OMB, 2003.  
Cartography: RUPRI Center for Rural Health Policy Analysis, 2004

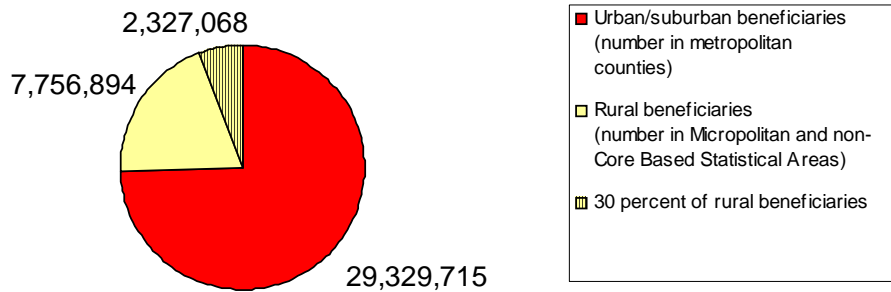
**Figure 3: Medicare Beneficiaries Categorized as Residing in a Rural Area, Using the TRICARE Definition of Rural**



Source: Claritas PopFacts, 2003.

Note: The figure presents the number of people aged 65 years and older as a proxy for Medicare beneficiaries. The actual number of beneficiaries will vary slightly from these estimates, as the estimates include the few individuals in this age category that do not qualify for Medicare, and do not include beneficiaries younger than 65.

**Figure 4: Medicare Beneficiaries Categorized as Residing in a Rural Area, Using the Office of Management and Budget Definition of a County as Nonmetropolitan**

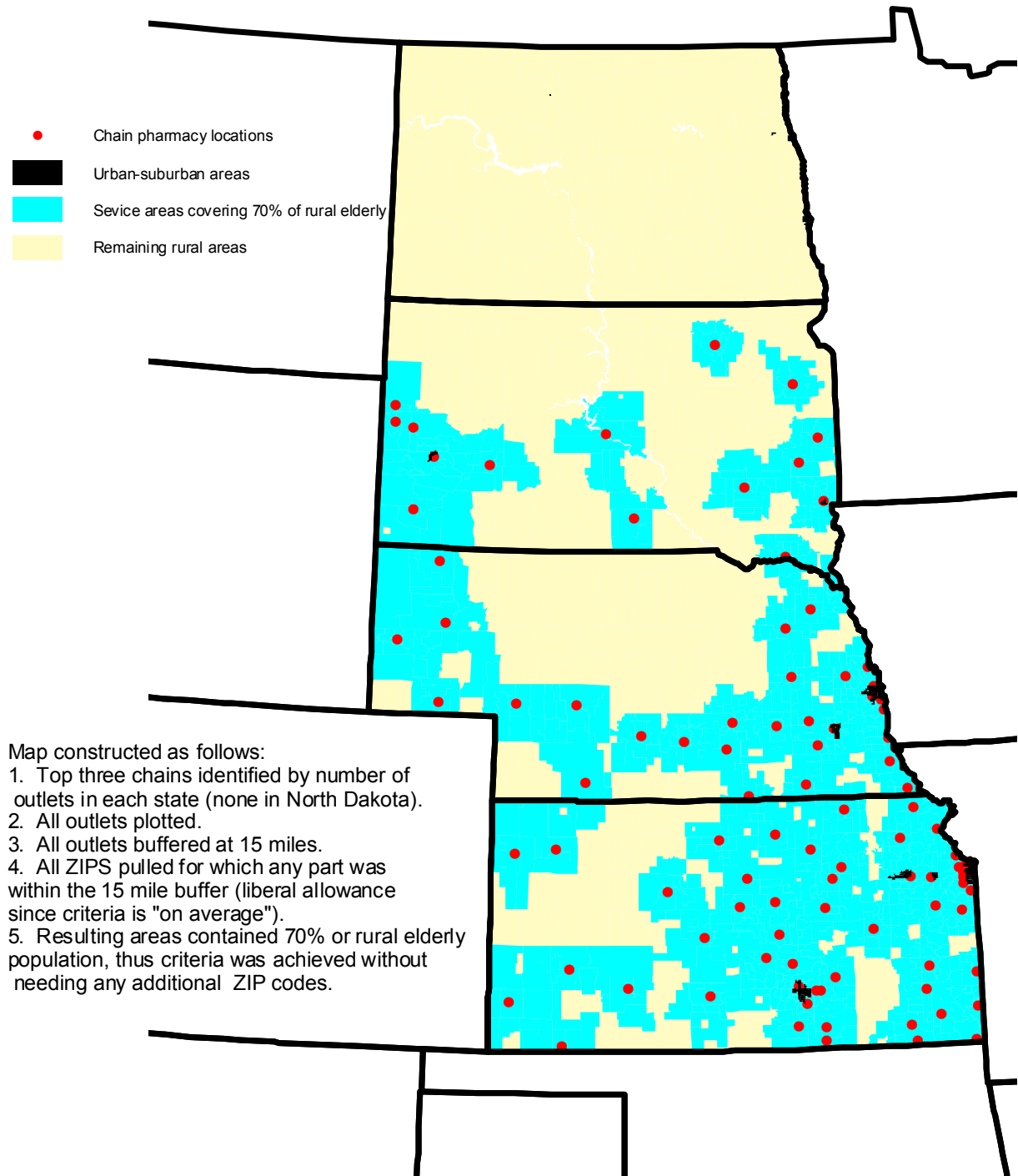


Source: Claritas PopFacts, 2003.

Note: The figure presents the number of people aged 65 years and older as a proxy for Medicare beneficiaries. The actual number of beneficiaries will vary slightly from these estimates, as the estimates include the few individuals in this age category that do not qualify for Medicare, and do not include beneficiaries younger than 65.



**Figure 5: Hypothetical Areas That Must be Served, Using TRICARE Definition of Rural, Assuming Drug Plans Contract With Largest Chain Pharmacies in a Multi-State Region**



Source: #MDA906-03-R-0002, DoD, 2003  
 Cartography: RUPRI Center for Rural Health Policy Analysis, 2004.