

## Changes in the Rural Registered Nurse Workforce from 1980 to 2004

### Background

Current and projected nationwide shortages of registered nurses (RNs) threaten access to and quality of care in most parts of the country. In rural areas health care is frequently challenged by uneven distribution of health care providers, including nurses. Strategies to address nursing shortages in rural areas may be different from those in urban areas. Knowledge of rural nurses' education, demographics, and practice characteristics, and how these have changed over time, is important for rural health policy and planning.

### Study Design

Study data came from 1980-2004 results of the National Sample Survey of Registered Nurses, a nationally representative survey of licensed RNs conducted by the federal government every four years, and from Claritas data (Census-derived) on the general U.S. population. We determined rural geography using Rural-Urban Commuting Area definitions, and weighted survey responses to the general RN population to describe rural and urban RN demographics, education, and employment characteristics over time.

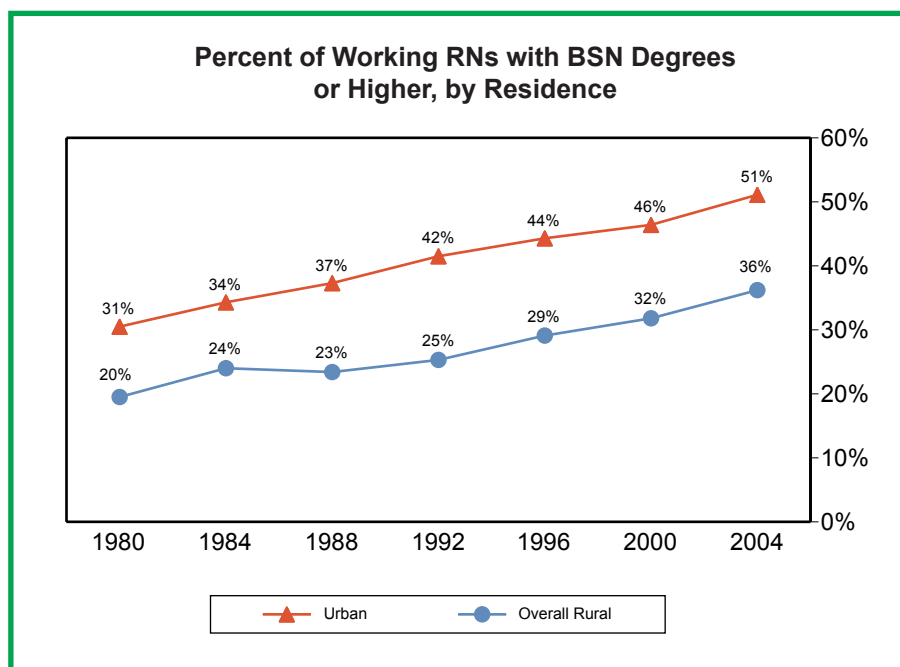
### Major Findings

#### Demographics

- Between 1980 and 2004, the number of rural RNs grew by 216% and the number of urban RNs grew 173%. In 2004, 18% (519,527) of RNs lived in rural areas compared with 15% (240,068) in 1980.
- The average age of working RNs in rural and urban areas in 2004 was 45 years, more than 5 years older than the average in 1980.
- The percent of rural RNs who are male and the percent who are non-white or Hispanic has increased since 1980, but the RN workforce continues to underrepresent all these groups.

#### Education

- The percentage of all working RNs with BSN or higher nursing degrees has increased since 1980 (see figure), but rural RNs continue to have less nursing education than urban RNs.
- The average age at which RNs in rural areas completed their basic RN degree was slightly higher in rural areas than in urban (28 versus 27 years) in 2004, up from 23 years for both rural and urban areas in 1980.



## Employment

- In 2004, 85% of rural RNs and 83% of urban RNs were employed in nursing compared with 75% of rural RNs and 77% of urban RNs in 1980.
- The proportion of both rural and urban RNs who work in hospitals has declined since 1980, while the proportion working in public/community health and ambulatory care has generally increased.
- More rural RNs worked full time in 2004 than did urban RNs (74% versus 70%), an increase from 68% for both in 1980.
- Since 1980 there has been a large increase in the number of RNs who live in rural areas, but a steeply growing proportion of these rural RNs commute to larger rural towns and to urban areas for work (see figure).
- As a result of this increase in commuting by rural RNs, the number of working RNs per capita has remained lower in rural areas than in urban areas from 1980 to 2004 (see figures).
- The salaries of RNs who live in rural areas remain lower than urban-residing RNs, regardless of whether or not they work in urban areas, and this salary gap has increased since 1980.

## Policy Implications

Rural RNs continue to have less nursing education on average than urban RNs, their average age has increased, and a growing proportion commute to larger rural towns and urban areas for their work. Rural nurse demography, education, and work patterns indicate that rural health care administrators will continue to face challenges in maintaining adequate RN resources for their facilities.

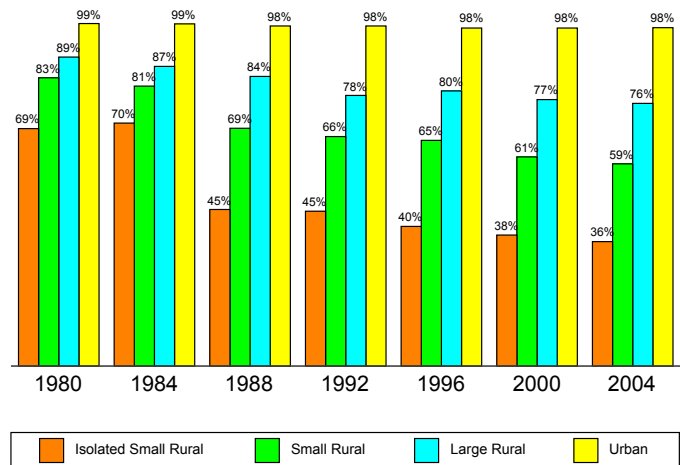
This project was supported by a grant from the federal Office of Rural Health Policy. Findings are more fully described in WWAMI RHRC Final Report #115: Skillman SM, Palazzo L, Hart LG, Butterfield P. Changes in the Rural Registered Nurse Workforce Since 1980. October 2007.



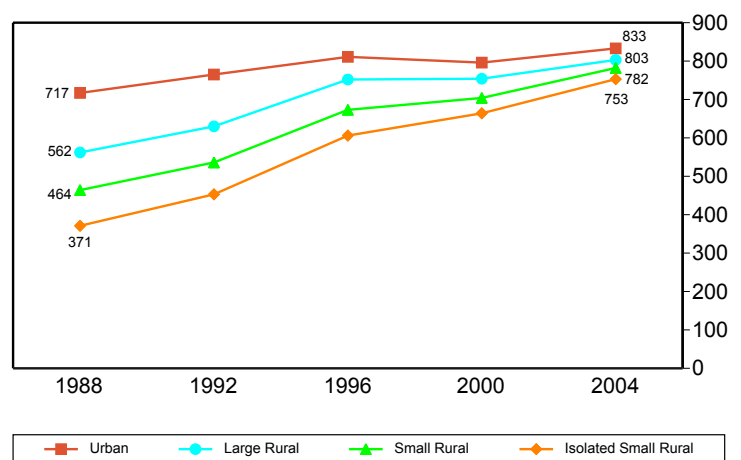
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## Working RNs Who Live and Work in the Same Area Type



## RNs to 100,000 Population by RN Residence Area Type



## RNs to 100,000 Population by RN Work Area Type

