Rural RNs in the US Since 1980

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June 10, 2008
Data Sources

• National Sample Survey of Registered Nurses (NSSRN), from DHHS, HRSA

• US Population data from CLARITAS (based on Census and other demographic and economic sources)
Funding

• Health Resources and Services Administration (HRSA)
  – Office of Rural Health Policy, to University of Washington, WWAMI Rural Health Research Center
Study Population

• Actively practicing RN population in the US at the time of each survey

Exclusions:
– Not residing in the US or territories
– Missing residence and/or work data needed to determine rural/urban classification
– <18 or >75 years of age
– In the military
How “Rural” was Determined

• Rural-Urban Commuting Areas (RUCA) Taxonomy*:
  – Urban, Large Rural, Small Rural and Isolated Small Rural area types
  – For 1988-2004 data, used ZIP codes of RNs’ residence and work to assign RUCA classification
  – For 1984 and prior data sets (that lacked ZIP codes), used Urban Influence Codes (UIC) mapped to ZIPs to assign RUCAs

* Version 2.0 (http://depts.washington.edu/uwruruca)
RN Sample and Weights

• NSSRN survey sample frame and weights provide an unduplicated count of licensed RNs in the US

• Takes into account that some RNs are licensed in more than one state
Purpose of the Study

• From 1980 to 2004, what changes have occurred in rural RNs’ -
  – Demographics
  – Education
  – Employment
Demographic Findings
Number of RNs* Residing in Urban and Rural Areas


1,612,335
1,839,356
2,020,262
2,225,035
2,549,366
2,676,992
2,886,992

14.9% rural 1980
18.0% rural 2004

* Includes both RNs working and not working in nursing
Percent of RNs Employed in Nursing

<table>
<thead>
<tr>
<th>Residence:</th>
<th>1980</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>77%</td>
<td>83%</td>
</tr>
<tr>
<td>Overall Rural</td>
<td>75%</td>
<td>85%</td>
</tr>
</tbody>
</table>
# RN Gender and Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent male</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>3.1%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Overall rural</td>
<td>3.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Percent non-white</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>8.9%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Overall rural</td>
<td>4.4%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>
Education Findings
Percent of Working RNs with BSN or Higher, by Residence
Percent of RNs with Advanced* Nursing Degrees, by Residence

* Master’s degree or higher
Employment Findings
Working RNs Who Live and Work in the Same Area Type

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Large Rural</th>
<th>Small Rural</th>
<th>Isolated Small Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>69%</td>
<td>83%</td>
<td>69%</td>
<td>45%</td>
</tr>
<tr>
<td>1984</td>
<td>70%</td>
<td>81%</td>
<td>66%</td>
<td>45%</td>
</tr>
<tr>
<td>1988</td>
<td>69%</td>
<td>84%</td>
<td>78%</td>
<td>45%</td>
</tr>
<tr>
<td>1992</td>
<td>66%</td>
<td>78%</td>
<td>80%</td>
<td>40%</td>
</tr>
<tr>
<td>1996</td>
<td>65%</td>
<td>80%</td>
<td>80%</td>
<td>38%</td>
</tr>
<tr>
<td>2000</td>
<td>61%</td>
<td>77%</td>
<td>61%</td>
<td>36%</td>
</tr>
<tr>
<td>2004</td>
<td>59%</td>
<td>76%</td>
<td>59%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Work Area Type of RNs Who Live in Isolated Small Rural Areas

36% 17% 22% 25% 38% 19% 21% 23% 40% 21% 18% 21% 45% 22% 17% 22% 70% 7% 8% 20% 21% 21% 19% 17% 45% 45% 40% 38% 36% 17% 17% 13% 10% 8% 8% 18% 21% 18% 21% 21% 19% 17% 17% 69% 70% 45% 45% 40% 38% 36%

Legend:
- **Yellow**: Urban
- **Teal**: Large Rural
- **Green**: Small Rural
- **Orange**: Isolated Small Rural
By Work Area Type –
Type of Work for Urban and Rural RNs, 1980-2004

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>61%</td>
<td>51%</td>
<td>67%</td>
<td>59%</td>
</tr>
<tr>
<td>Nursing Homes</td>
<td>8%</td>
<td>10%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>Public/Community Health</td>
<td>11%</td>
<td>15%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Ambulatory Care</td>
<td>11%</td>
<td>11%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
<td>13%</td>
<td>11%</td>
<td>14%</td>
</tr>
</tbody>
</table>
By Work Area Type –
RNs Working in Ambulatory Care

- Urban
- Large Rural
- Small Rural
- Isolated Small Rural

Percentage distribution over the years from 1980 to 2004.
By Work Area Type – RNs Working in Nursing Homes

Urban
Large Rural
Small Rural
Isolated Small Rural

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50%
By Work Area Type – RNs Working in Public/Community Health

- Urban
- Large Rural
- Small Rural
- Isolated Small Rural
By Work Location – RNs Working Full Time

- Rural Overall: 68% (1980) to 74% (2004)
RNs to 100,000 Population by RN Residence

- Urban
- Large Rural
- Small Rural
- Isolated Small Rural
By Work Area Type –
Median Full-Time RN Salary by Highest Degree

Urban Š ADN
Urban  BSN
Rural  BSN
Rural Š ADN


$0 $10,000 $20,000 $30,000 $40,000 $50,000 $60,000 $70,000

$15,000 $16,000 $17,000 $18,000 $45,000 $53,000 $54,000 $60,000

$45,000 $53,000 $54,000 $60,000
Median Full-Time Salaries of RNs by Work:Residence Area Types

- Urban W:Urban R
- Rural W:Urban R
- Urban W:Rural R
- Rural W:Rural R


U:U higher than R:R by 15.2%
U:U higher than R:R by 22.4%
Summary
Summary of Key Findings

• While the rural and urban RN workforce is growing and becoming more diverse, it is also aging
  – The average age of initial RN degree is also increasing

• Despite gains in attaining BSN and higher degrees, rural RNs continue to lag behind urban RNs
Summary of Key Findings (cont)

• Since 1980, increasing percentages of RNs are commuting from their areas of rural residence to work in urban and larger rural areas
  – This is occurring at the same time that more RNs are LIVING in rural areas
Summary of Key Findings (cont)

• Fewer RNs are working in hospitals, and more rural RNs are working full time
• RNs living in rural areas continue to earn less than RNs in urban areas, even if they commute to urban and less rural areas to work and in spite of education attained
Questions?

• Why are rural RNs going outside of their residence areas to work?
  – *Are there too few jobs in rural areas, or are the jobs in larger towns more attractive?*

• The RN workforce is aging:
  – *Will this impact rural more than urban?*

• Do rural areas need, or want, RNs with more education?
For More Information:

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