

### The Nursing Situation in Wyoming

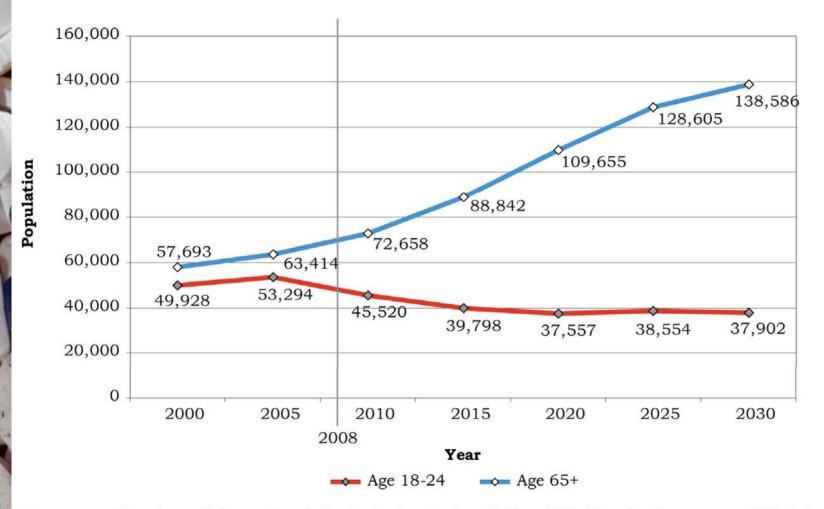
Topics in R&P's study of nursing demand:

- Demographics population changes and age groups.
- Projected need for nurses.
- Current health care employment and wages.
- Population and health care growth.
- Hospital records by age group.

### Demographics and Aging

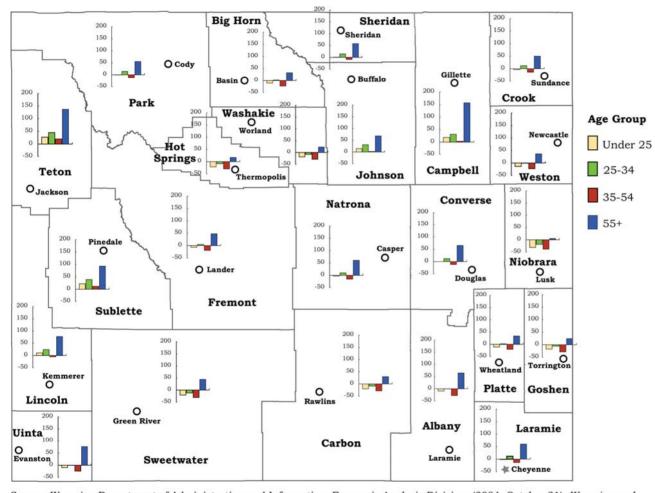
- Wyoming's changing population:
  - Older age groups increasing.
  - Younger age groups declining.
- Increased life expectancy means more chronic illness, degenerative disease.
- Older populations require more longterm care.
- Many nurses also near retirement age.

#### Projected Population Growth for Wyoming, 2000-2030



Data source: Wyoming and County Population Projections by Age: 2003 to 2020. Wyoming Department of Administration and Information, Economic Analysis Division (http://eadiv.state.wy.us). Wenlin Liu. Internet release October 21, 2004.

## Projected Percentage Changes in Population by Wyoming County and Age Group, 2000 to 2020



- 55-andolder group is projected to increase in nearly all counties.
- Younger age groups will have smaller increases or some declines.

Source: Wyoming Department of Administration and Information, Economic Analysis Division. (2004, October 21). Wyoming and county population projections by age, 2003-2020. Retrieved October 10, 2007, from http://eadiv.state.wy.us/pop/agsx00\_20.htm

#### Projected Need for Nurses

- In addition to job growth, the greatest challenge will be replacing existing nurses as they:
  - Retire.
  - Quit.
  - Are terminated.
- Demand for nurses is expected to be most severe in small facilities.

# Components of Change by Projection Scenario and Industry, 2006-2014

	Ambulatory Health Care Services		Hospitals		Nursing & Residential Care Facilities		Total Health Care	
Analysis	Current Policy	Policy Change	Current Policy	Policy Change	Current Policy	Policy Change	Current Policy	Policy Change
RNs 2006 (Estimated)	652	652	2,200	2,200	293	293	3,145	3,145
Growth Need	486	165	592	314	135	362	1,213	841
Replacement Needa	496	496	1,367	1,367	231	231	2,094	2,094
Projected Total Nursing Demand 2006-2014	982	661	1,959	1,681	366	593	3,307	2,935

<sup>&</sup>lt;sup>a</sup>Replacement need calculation basis was the 2006 estimate of nurses working.

#### A Change in Policy?

- Under current hiring practices in Wyoming, 3,307 more registered nurses will be needed in 2014 than in 2006, a 103.9% increase.
- Current practice often allows several part-time nurses to fill a full-time shift.
- A change in policy might only slightly reduce nursing demand.

#### Health Care Employment and Wages

Based on quarterly Unemployment Insurance reporting of employment and wages, from 2000 to 2007:

- Some industries in health care had a decrease in employment per firm.
  - Trouble filling positions?
- Some industries had decreased wages.
  - Some jobs filled by lower-paid staff such as certified nursing assistants?

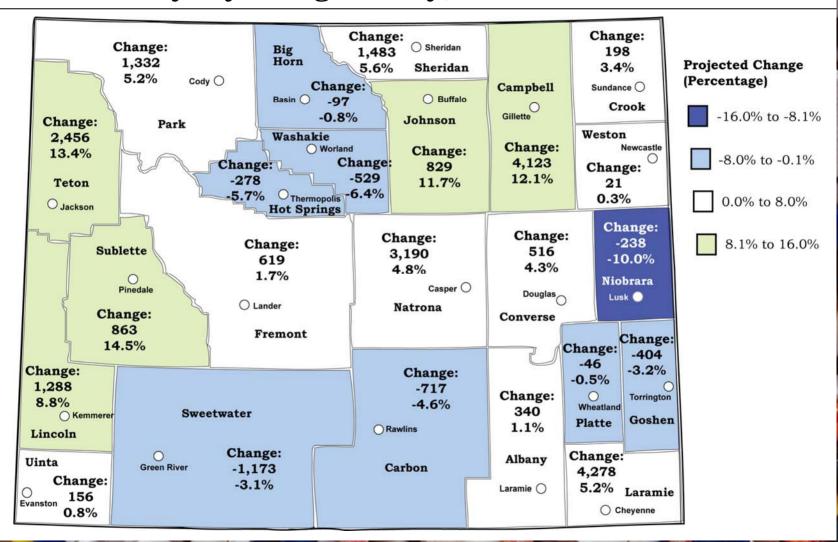
#### Health Care Employment and Wages

- Employment and wages in health care grew faster than for health care and all industries combined (2000-2007).
- Notable changes:
  - Average weekly wages in offices of physicians increased significantly (71.5%).
    - Higher-paid employees than other firms?
  - Firms in offices of physicians grew in number and employment size.

#### Population and Health Care Growth

- From 2000 to 2007, health care growth in Wyoming was linked to overall population growth.
- Counties with the highest projected percentage increases and highest decrease in population (2003-2020):
  - Sublette (14.5%)
  - Teton (13.4%)
  - Niobrara (-10.0%)

## Projected Percentage Change in Population by Wyoming County, 2003 to 2020



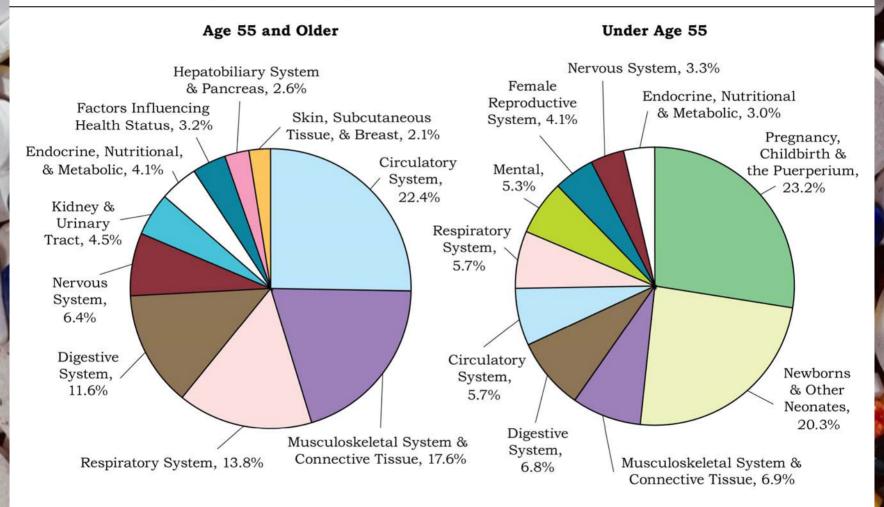
#### Health Insurance Availability

- From 2000 to 2007, employer-provided health insurance was most likely to be available to residents of counties with the largest population.
- The number of near-elderly is rising in Wyoming at the same time that employer-provided health insurance is declining.

#### Hospital Records by Age Group

- Hospitalization reasons vary by age:
  - Younger = childbirth, childhood illness
  - Older = chronic illness (heart disease, high blood pressure)
- Usage of care units varies by age:
  - Younger = neonatal, obstetrics
  - Older = cardiac, respiratory
- Older patients often have longer hospital stays than younger patients.

# Top 10 Major Diagnostic Codes, Age 55 and Older and Under Age 55, July 1, 2005 – December 31, 2005



Note: Percentages do not total 100% because only the top 10 major diagnostic codes are shown.

#### Nurse Survey Results

- 2007 survey of Wyoming nurses found:
  - Many nurses work in general medicine, general surgery, or obstetrics.
  - Far fewer nurses work in cardiac,
    respiratory, and cancer care the
    specialties needed by older patients.
  - Where a nurse works might not match the training received; mismatch between skills used now and skills needed for the future.

#### Conclusions

- Growing and aging population.
- Projected demand for nurses likely to exceed supply.
- Increased need for health care across Wyoming:
  - Specialized services, especially for elderly.
  - Nurses to work in those specialties.

### Questions or Comments?



#### For more information:

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http://doe.state.wy.us/LMI/nursing.htm