



Wyoming Nurses: Demand and Retention

Presentation to Wyoming Medical Center
Casper, Wyoming
June 17, 2008

Research & Planning
Wyoming Department of Employment
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About Research & Planning, Wyoming Department of Employment

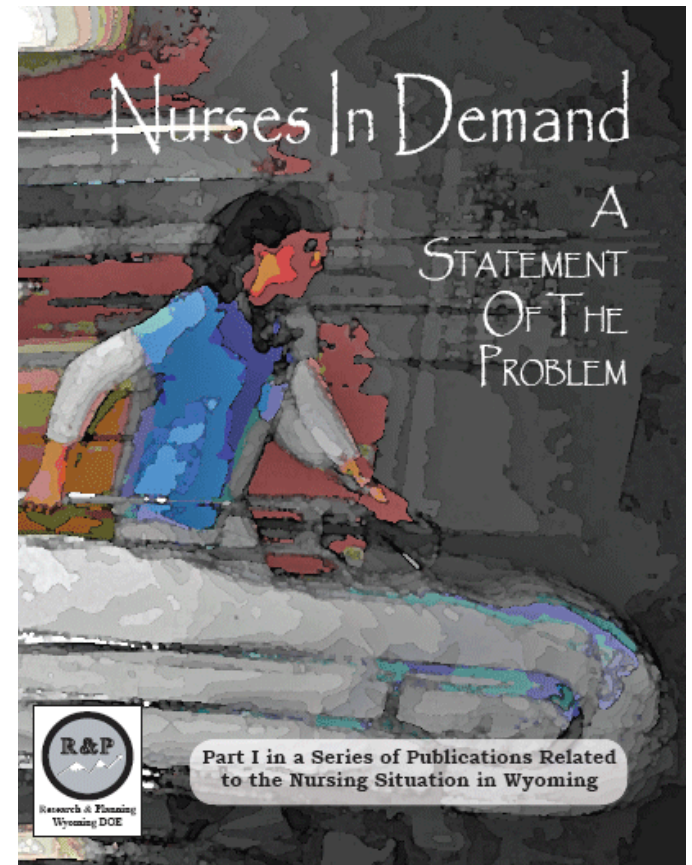
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- **What We Do:** R&P collects, analyzes, and publishes timely and accurate labor market information (LMI) meeting established statistical standards.
- **Our Customers:** LMI makes the labor market more efficient by providing the public and the public's representatives with the basis for informed decision making.

Introduction

- Demand – concern about the boom generation of nurses retiring and the inability of the supply system to replace them and keep up with growing demand
- Current Wyoming Study
 - Longitudinal administrative records
 - Cross-sectional survey
- How do we know it is the workplace?
- Selected workplace characteristics amenable to management
- Where nurses come from and where they go
- How earnings change upon job change
- The current deficit

Nursing Demand Report

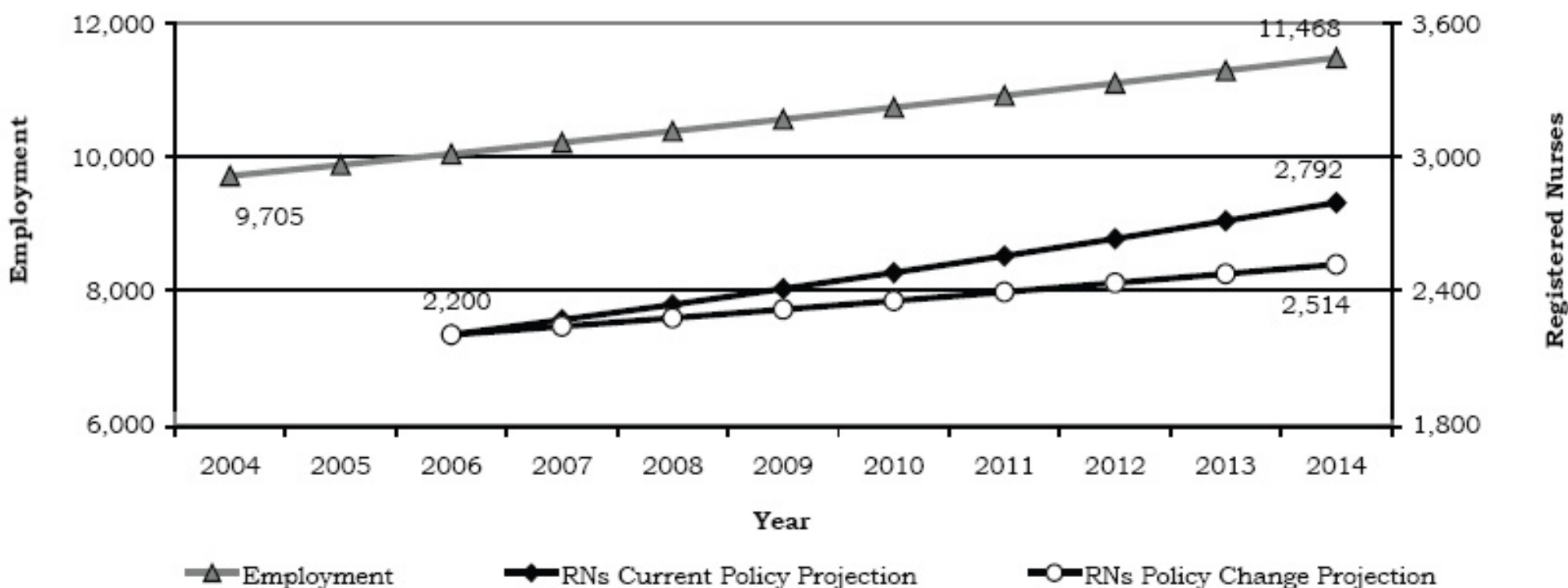
- Concern about:
 - The boom generation of nurses retiring
 - The inability of the supply system to replace them and keep up with growing demand



Published March 2008

http://doe.state.wy.us/LMI/nursing_demand_08.pdf

Projections of Registered Nurses Working in Wyoming Hospitals, 2004-2014 (excludes vacancies or replacement need)



Source: RN data from Wyoming State Board of Nursing license files; Employment data from Quarterly Census of Employment and Wages.

Administrative Records Research Strategy: Linked Data

Quarterly Census of Employment and Wages

Unemployment Insurance employer account number

Employee pay and social security number



Board of Nursing records

Social security numbers for APNs, RNs, LPNs, and CNAs



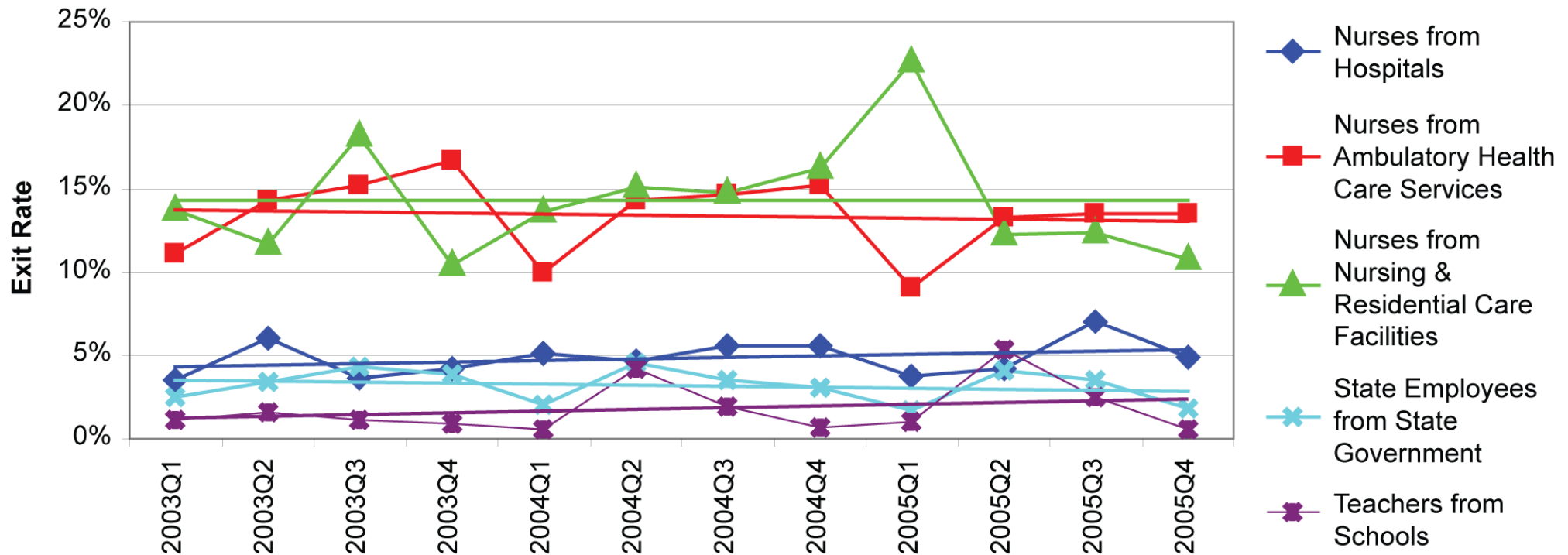
Survey (census) of Wyoming nurses working in health care, June-July 2007



Qualitative analysis

How Do We Know it Is the Workplace?

Exit Rates and Linear Trend for Female Nurses, State Employees, and Teachers in Wyoming, First Quarter 2003 (2003Q1) to Fourth Quarter 2005 (2005Q4)



Restricted to nurse exits from Hospitals (North American Industry Classification System – NAICS 622), nurse exits from ambulatory health care (NAICS 621), nurse exits from nursing & residential care facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and teacher exits from schools (NAICS 611110). Nurses are registered RNs as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's education staff file. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

Coming Soon: Nursing Retention Report

RETENTION OF NURSES IN WYOMING



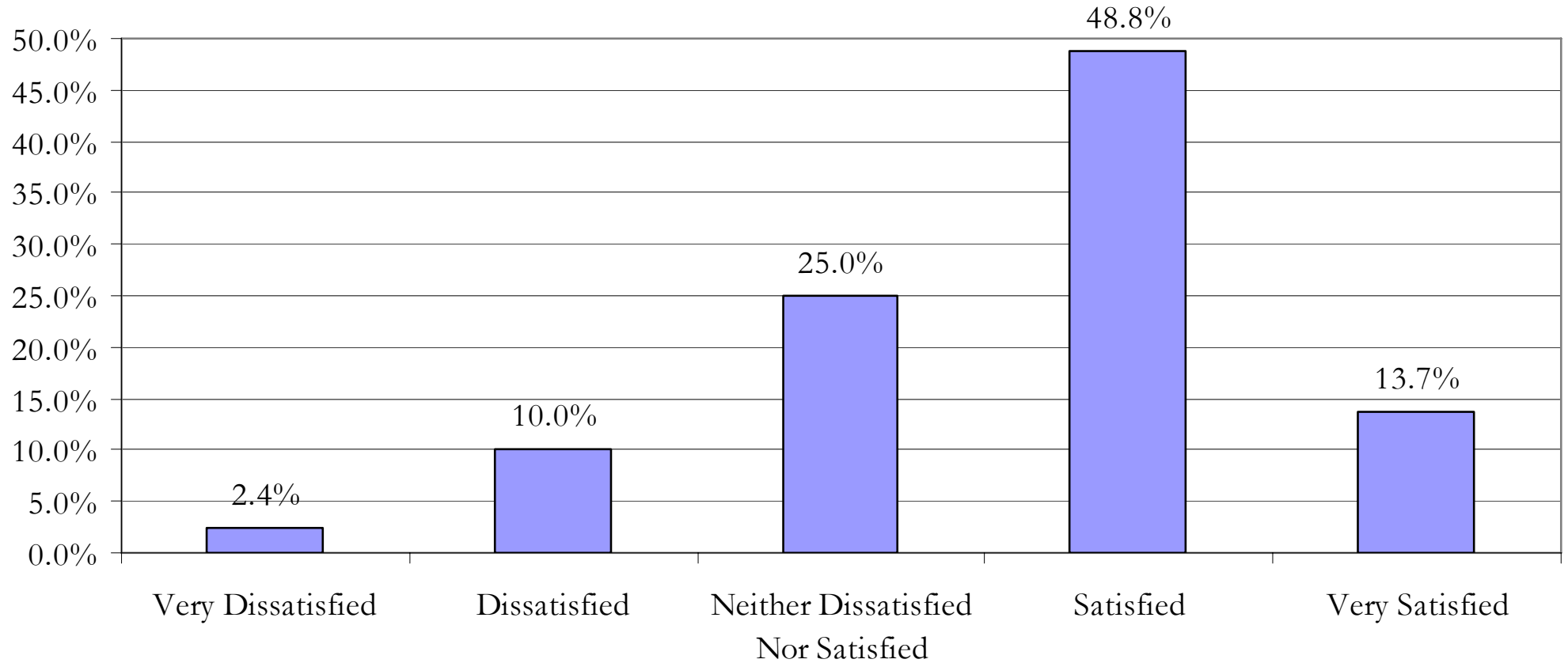
Wyoming Department of Employment

Part II in a Series of Publications Related
to the Nursing Situation in Wyoming

July 2008

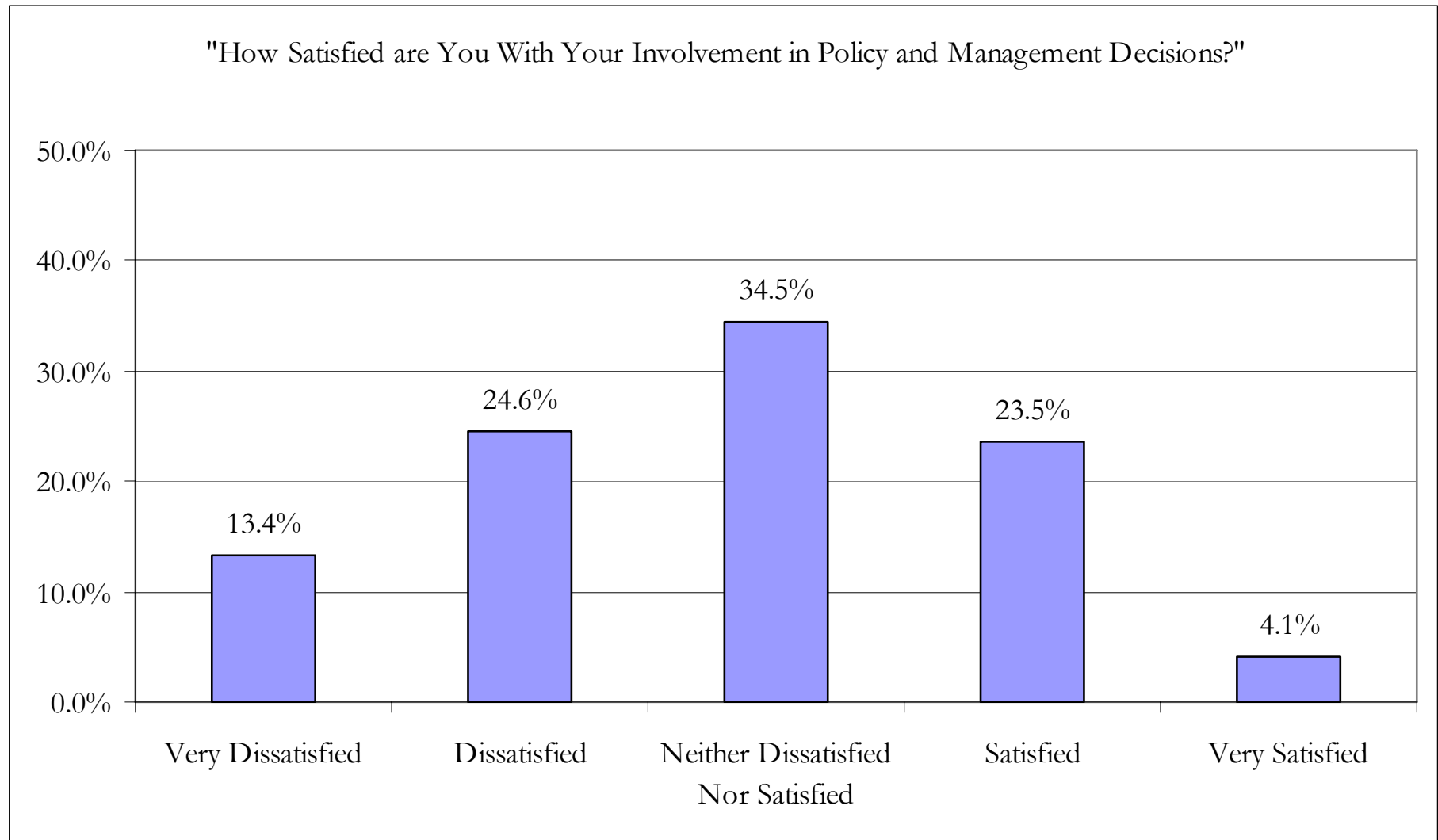
Survey Response from Direct Patient Care Nurses in Hospitals and Long-Term Care

"How Satisfied are You With Physician Interactions?"



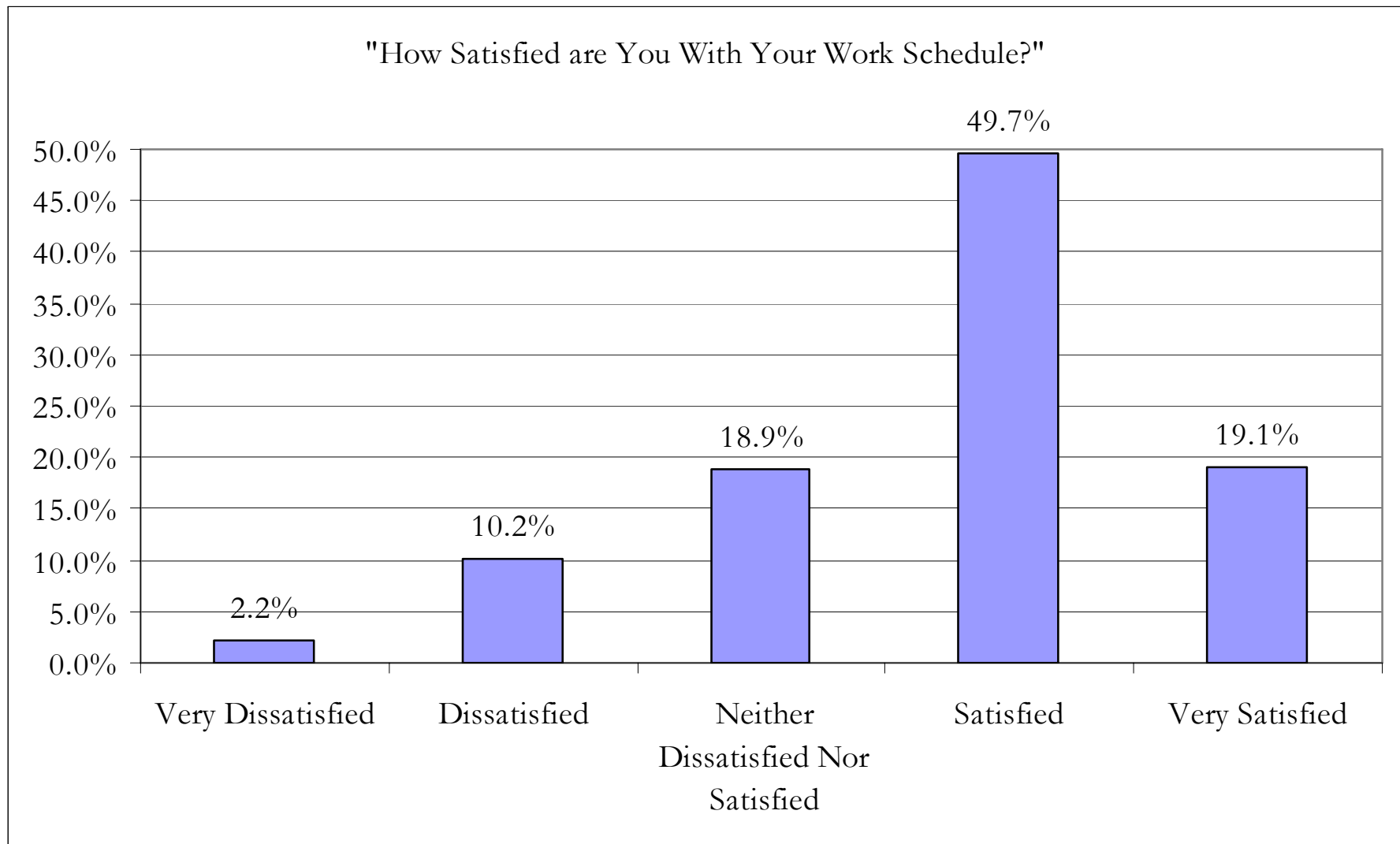
Nurses who responded = 1,976

Survey Response from Direct Patient Care Nurses in Hospitals and Long-Term Care



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Survey Response from Direct Patient Care Nurses in Hospitals and Long-Term Care



Nurses who responded = 1,976

Comments from Direct Patient Care Nurses in Hospitals and Long-Term Care

| North American Industry Classification System Title and Code | Age | Comments |
|---|------------|---|
| Hospitals 622 | 38 | I am a nurse and can go anywhere. Only staying now because of 2 kids. When they are grown, we will travel. |
| Hospitals 622 | 56 | Will leave when sons graduate high school. |
| Hospitals 622 | 36 | Cannot leave until children graduate high school because of joint custody agreement. |
| Hospitals 622 | 57 | I have multiple job opportunities. I stay here til my son graduates from high school, then I leave. |
| Hospitals 622 | 56 | Don't want to move until my children are out of school. |
| Hospitals 622 | 52 | After one more year of high school, my son will leave for college and there will not be anyone dependent at home. |

Figure 1: Wyoming Firm-Level RN Exit Rates (Hospitals) and Salary Satisfaction Scores (Question 21), 2007Q3

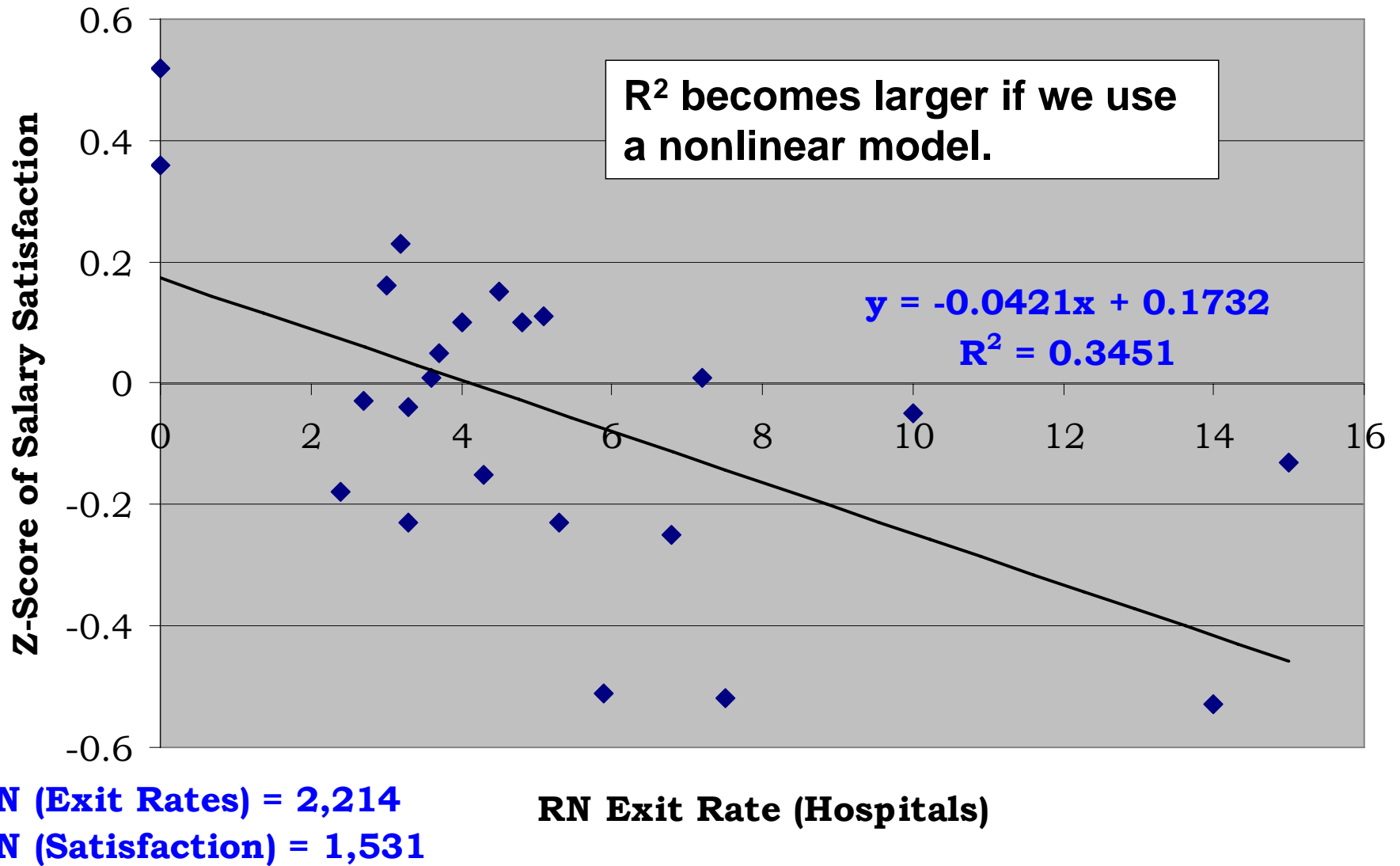
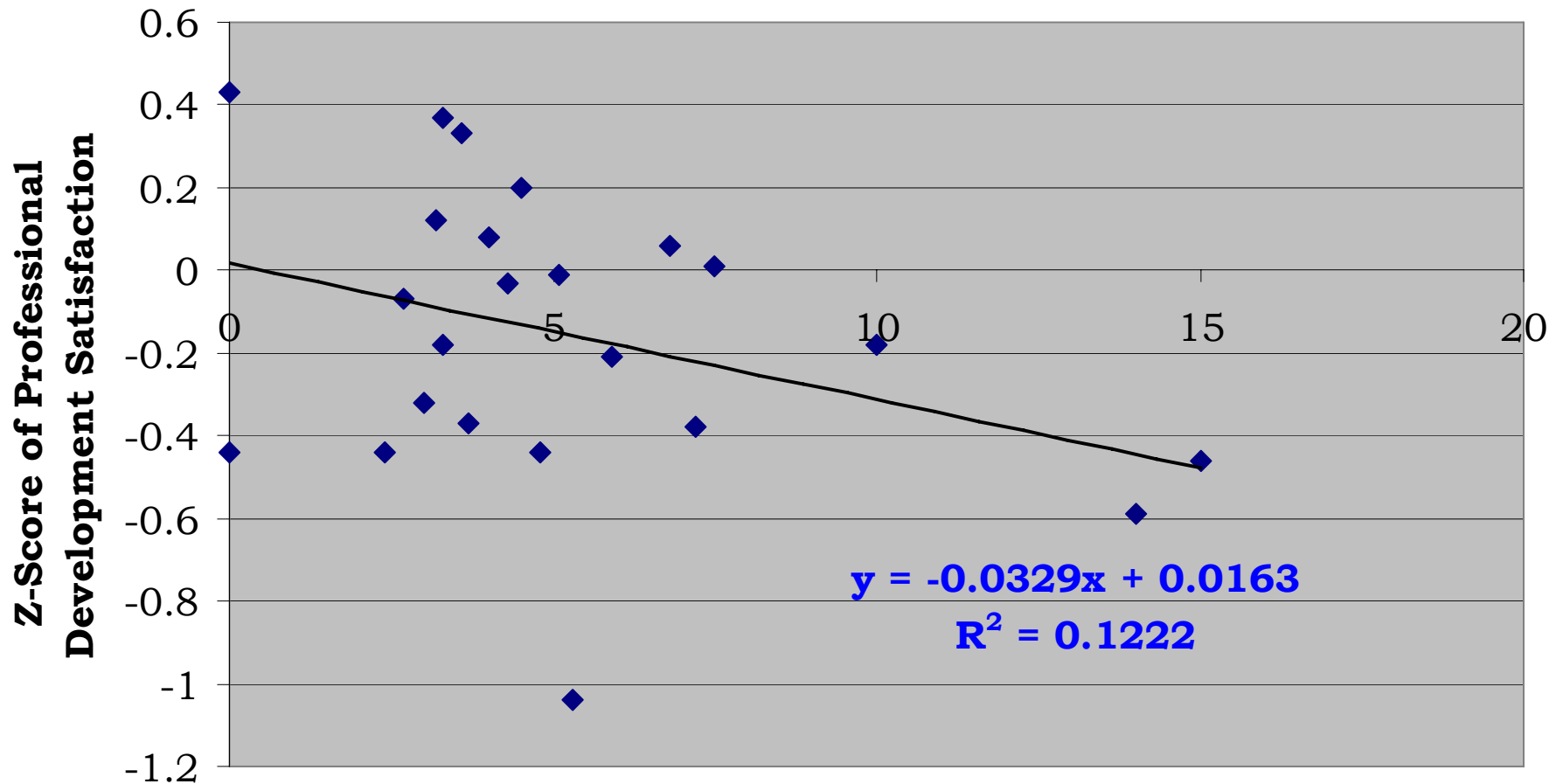


Figure 3: Wyoming Firm-Level RN Exit Rates from Hospitals and Professional Development Satisfaction Scores (Questions 34, 43,44, and 45), 2007Q3



N (Exit Rates) = 2,214
N (Satisfaction) = 1,531

RN Exit Rate (Hospitals)

| | | Professional Development | | | | | Not Satisfied | | Satisfied | |
|-----|--|---------------------------------|---|---|---|---|---------------|--|-----------|--|
| 34. | Opportunities for advancement | 1 | 2 | 3 | 4 | 5 | NA | | | |
| 43. | Opportunities to use your skills | 1 | 2 | 3 | 4 | 5 | NA | | | |
| 44. | Opportunities to learn new skills | 1 | 2 | 3 | 4 | 5 | NA | | | |
| 45. | Opportunities for continuing education | 1 | 2 | 3 | 4 | 5 | NA | | | |

Interpersonal

| | | | | | | | | | |
|-----|---|---|---|---|---|---|----|--|--|
| 24. | Skill of RNs where you work | 1 | 2 | 3 | 4 | 5 | NA | | |
| 30. | Level of personal safety at the facility where you work | 1 | 2 | 3 | 4 | 5 | NA | | |
| 31. | Work schedule | 1 | 2 | 3 | 4 | 5 | NA | | |
| 33. | Job security | 1 | 2 | 3 | 4 | 5 | NA | | |
| 35. | Support from nurses with whom you work | 1 | 2 | 3 | 4 | 5 | NA | | |
| 36. | Support from your nursing administration | 1 | 2 | 3 | 4 | 5 | NA | | |
| 37. | Interactions with physicians | 1 | 2 | 3 | 4 | 5 | NA | | |
| 38. | Interactions with other non-nursing staff | 1 | 2 | 3 | 4 | 5 | NA | | |
| 40. | Interaction with patients | 1 | 2 | 3 | 4 | 5 | NA | | |
| 42. | Involvement in policy and management decisions | 1 | 2 | 3 | 4 | 5 | NA | | |
| 46. | Quality of patient care where you work | 1 | 2 | 3 | 4 | 5 | NA | | |
| 47. | Feeling that your work is important | 1 | 2 | 3 | 4 | 5 | NA | | |

Compensation

| | | | | | | | | | |
|-----|--------------------------------|---|---|---|---|---|----|--|--|
| 21. | Your current base salary | 1 | 2 | 3 | 4 | 5 | NA | | |
| 22. | Salary range for your position | 1 | 2 | 3 | 4 | 5 | NA | | |
| 23. | Employee benefits | 1 | 2 | 3 | 4 | 5 | NA | | |

Greater Probability of Stated Intent to Leave Primary Employer in 12 Months

LEAVE

- Younger
- Lower salary satisfaction
- Lower professional development satisfaction
- Less tied to community
- Lower interpersonal satisfaction
- Greater inclination to move

Excludes nurses at traditional retirement age (65) and nurses stating they intend to retire.

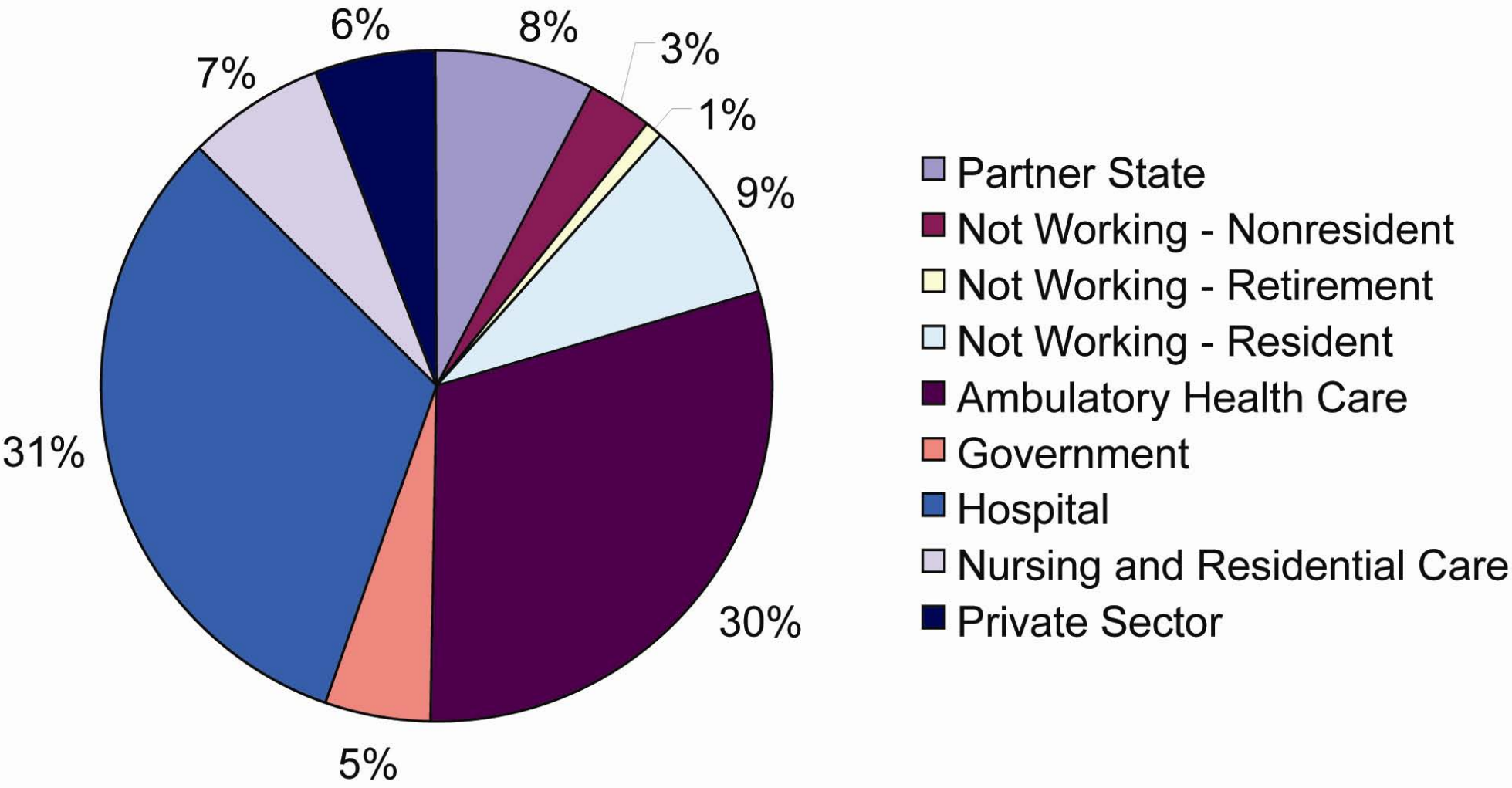
- Older (pre-retirement)
- Greater salary satisfaction
- Greater professional development satisfaction
- Stronger ties to community
- Greater interpersonal satisfaction
- Less inclined to move

A knowledge of these factors allows us to correctly predict 85.9% of the time the answer to the question, "Do you plan to leave employment with your primary facility within the next 12 months?"

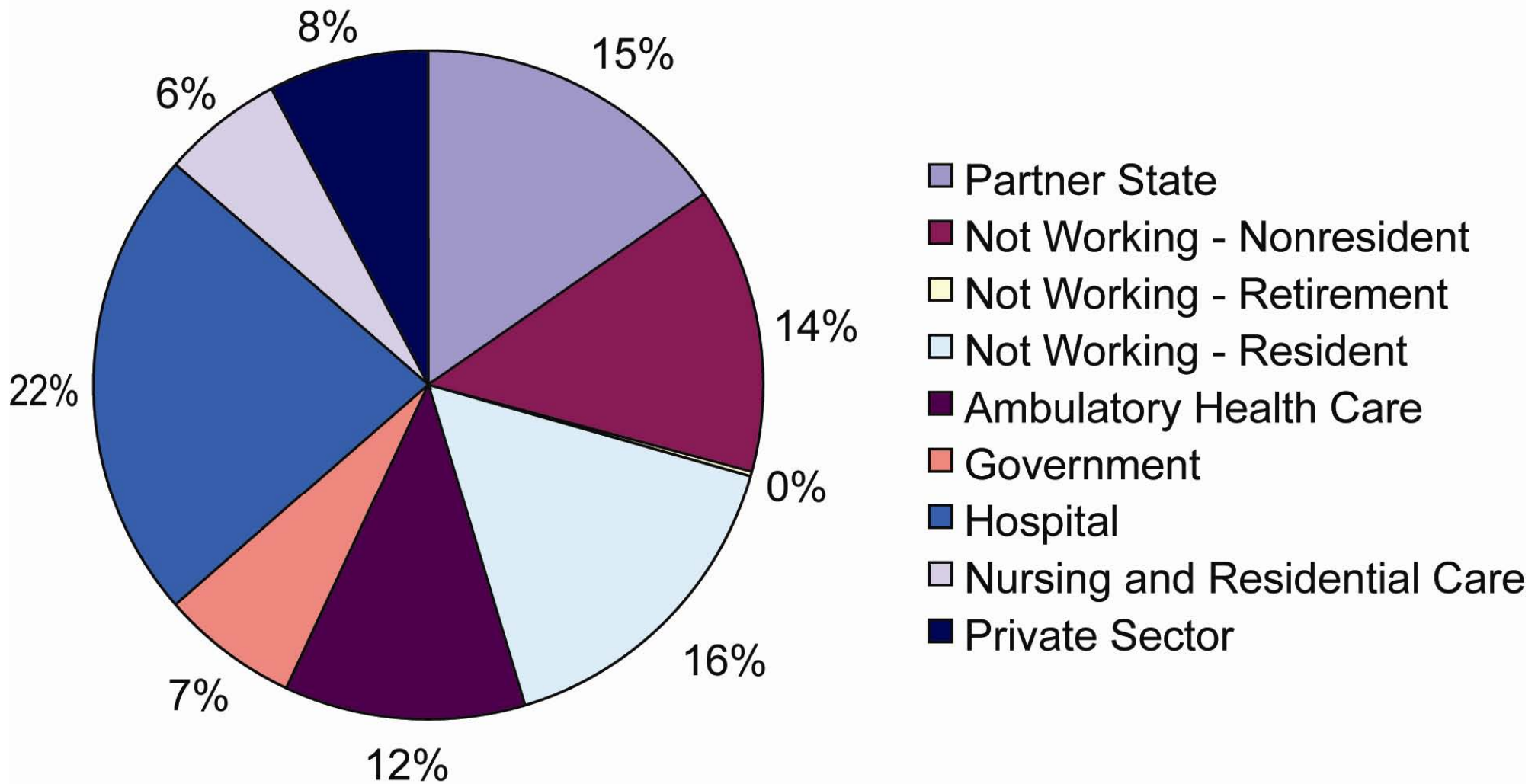
STAY

Lesser Probability of Stated Intent to Leave Primary Employer in 12 Months

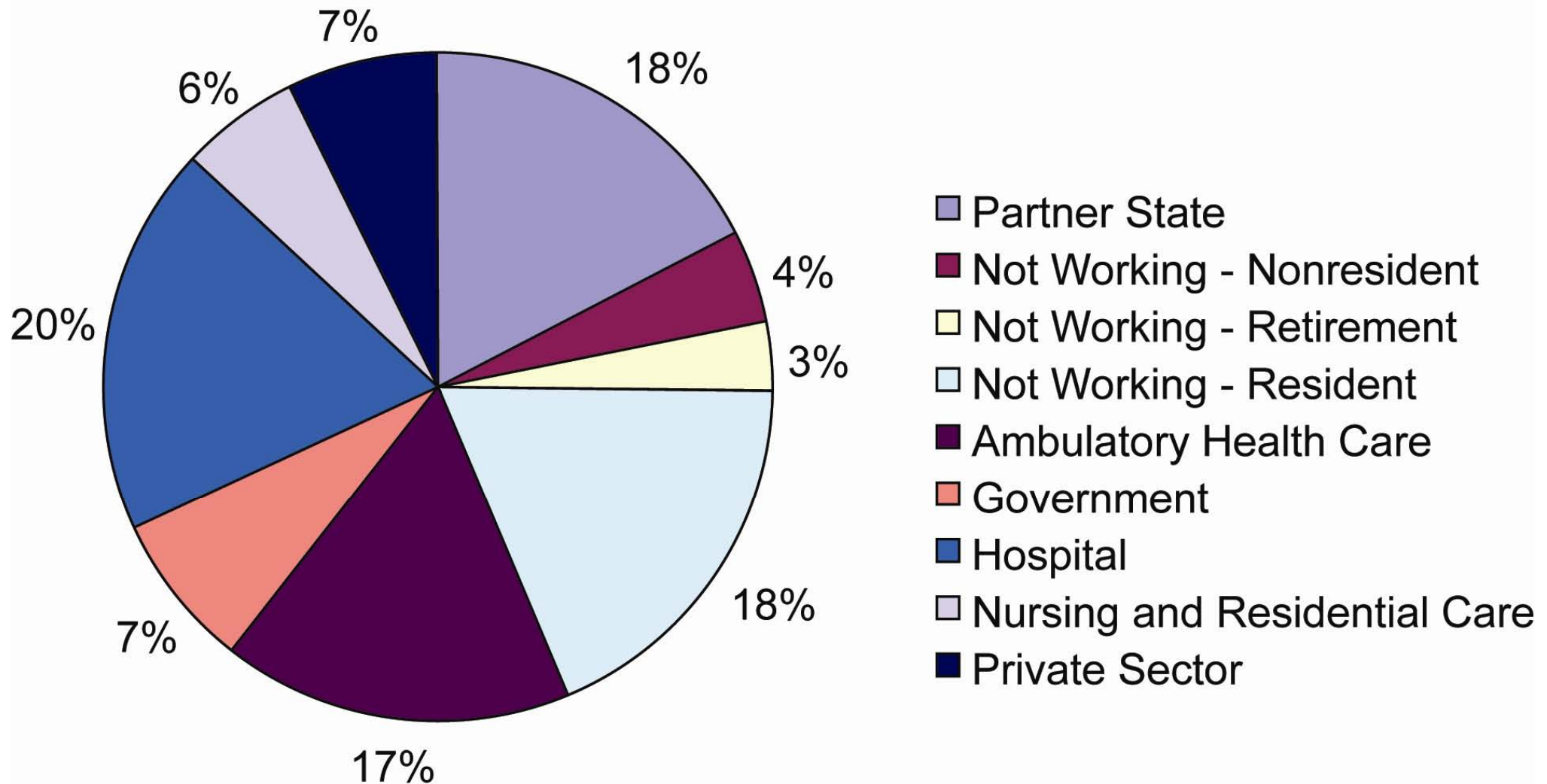
Source of Nurse Hires into Ambulatory Health Care Services, 2004Q4-2006Q3



Source of Nurse Hires into Hospitals, 2004Q4-2006Q3



Destination of Nurse Exits from Hospitals, 2003Q3-2005Q2



Percentage Change in Average Quarterly Earnings for Health Care Nurse Hires by Industry Subsector Source and Age, 2006

Hires: Ambulatory Health Care Facilities

| Subsector Source | <35 | 35-44 | 45-54 | 55+ |
|---|-------|--------|--------|-------|
| Ambulatory Care Facilities | 22.7% | 32.0% | 12.5% | -8.5% |
| Hospitals | -8.0% | -32.5% | -51.8% | NA |
| Nursing and Residential Care Facilities | NA | NA | -54.0% | NA |

Hires: Hospitals

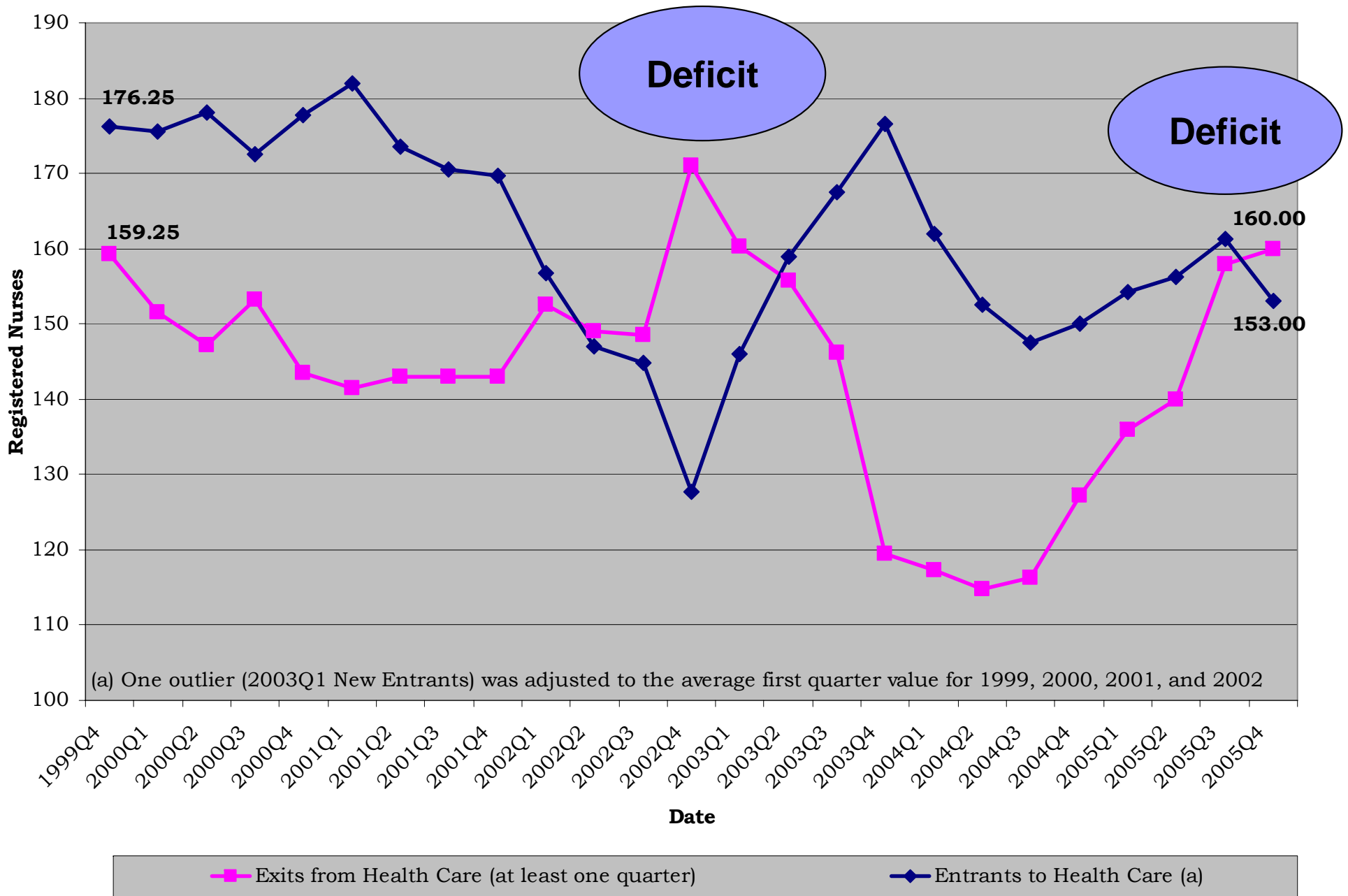
| Subsector Source | <35 | 35-44 | 45-54 | 55+ |
|---|-------|-------|-------|--------|
| Ambulatory Care Facilities | 65.6% | 38.7% | 9.1% | NA |
| Hospitals | -8.8% | 5.5% | 2.8% | -16.0% |
| Nursing and Residential Care Facilities | 70.1% | 23.5% | NA | NA |

Hires: Nursing and Residential Care Facilities

| Subsector Source | <35 | 35-44 | 45-54 | 55+ |
|---|--------|--------|--------|-----|
| Ambulatory Care Facilities | NA | NA | NA | NA |
| Hospitals | -29.0% | -38.7% | -16.5% | NA |
| Nursing and Residential Care Facilities | NA | -49.7% | NA | NA |

Note: Wages restricted to continuous employment transactions. Prior and subsequent quarterly wages were Consumer Price Index (not seasonally adjusted, U.S. city averages, all items) adjusted to 2006 dollars.

Figure 1: Comparison of Entrants to and Exits from Health Care (4 Quarter Moving Average)



For More Information



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