Delaware Healthcare Association

Delaware Acute Care Hospitals and Health Systems Workforce Needs 2003 - 2010

June 2004











Table of Contents

| Executive Summary | 1 |
|---------------------------------|----|
| Survey Criteria and Definitions | 3 |
| Workforce Needs at a Glance | 4 |
| Educational Offerings | 5 |
| Registered Nurse | 6 |
| Licensed Practical Nurse | 9 |
| Nurse Assistant | 12 |
| Allied Health Professionals | 15 |

Delaware Healthcare Association Delaware Acute Care Hospitals & Health Systems Workforce Needs 2003 - 2010 June 2004 Executive Summary

Background Information

The Delaware Healthcare Association conducted a survey of its members earlier this year to determine the projected health care workforce needs of Delaware's acute care hospitals, their affiliated long term care facilities, and affiliated home health agencies through the year 2010. This inaugural report provides current and projected information on our changing health care workforce and our needs in the future. Our plan is to publish this report annually and provide updated information on Delaware's health care workforce.

The hospitals and health systems that participated in the survey provided information regarding their current workforce and projected labor needs in the following areas of nursing and allied health professions:

Nursing:

- Registered Nurse
- Licensed Practical Nurse
- Nurse Assistant (certified and non-certified)

Allied health professionals:

- Pharmacist
- Pharmacy Technician
- Operating Room Technician
- Radiologic Technologist
- Cardiovascular Technologist
- Nuclear Medicine Technologist
- Ultrasound Technologist
- MRI Technologist
- Medical Technologist
- Respiratory Therapist
- Physical Therapist
- Physical Therapist Assistant
- Radiation Therapist

Home health care professionals:

- Home Health Aide
- Social Worker
- Occupational Therapist
- Physical Therapist
- Speech Therapist

While these positions represent a large component of our State's health care workforce, Delaware's acute care hospitals and health systems have an even greater impact on jobs and Delaware's overall economy. Based on the American Hospital Association's May 2004 edition of *Trend Watch*, Delaware's hospitals provide more than 16,800 full-time and part-time jobs that account for more than 9.2 percent of the State's employment.

Survey Participants

This report includes workforce projections for all of Delaware's acute care hospitals and health systems:

- Alfred I. duPont Hospital for Children
- Bayhealth Medical Center Kent General Hospital, Milford Memorial Hospital, and St. Jones Center
- Beebe Medical Center and Lewes Convalescent Center
- Christiana Care Health System Christiana Hospital, Wilmington Hospital, and Riverside Long Term and Transitional Care
- Nanticoke Memorial Hospital and LifeCare at Lofland Park
- St. Francis Hospital, St. Francis Skilled Nursing Facility, and Franciscan Care Center Brackenville
- Veterans Affairs Regional Medical Center

Key Survey Findings

The 2003 health care workforce survey of nurses and allied health professionals employed by Delaware's acute care hospitals and health systems included more than 8,100 people. Between 2004 and 2010, the number of health care professionals in these categories is projected to increase to over 11,000 (an increase of more than 2,500 new jobs), resulting in a 34 percent growth for the seven year period. The growth in the Registered Nurse (RN) workforce alone will be approximately 1,700 new nurses, which represents a 35 percent increase during the same seven year period. Lastly, the allied health professions in the survey indicate a need for 560 new positions, equal to a 29 percent growth for the same period.

Replacements for the current workforce

The survey also projects the number of health care professionals that must be recruited (replaced) by the hospitals, their affiliated nursing homes, and home health agencies to account for the nursing and allied health professionals who leave the workforce or choose to work in other health care settings from 2004 through to 2010, which represents approximately 3,600 people. We project that an estimated 2,200 RNs alone will be needed during this seven-year period just to fill the projected workforce changes.

The replacement projections are based on a conservative termination rate of 10 percent per year. The termination figure includes nurses and allied health professionals who will leave their current employer to accept a position with another employer, those who will retire, relocate, leave due to medical reasons, return to school for advanced education, or to take care of a family member(s). The typical reasons given for leaving to take a position with another health care employer (other than the hospital or nursing home) include improved work schedule and family life reasons such as no weekends, evening, or morning shift requirements. The new position that is taken, in many cases, is less physically demanding than the institutional setting and includes working in an elementary or secondary school, occupational health office, managed care company, or in a physician's office.

We estimate that if 25 percent of the terminated employees would change their employer, but continue to work for an acute care hospital or health system, the estimated replacement need of 3,600 health care professionals could be reduced by 900 to approximately 2,700 workers.

Projected new jobs and replacement needs from 2004-2010

The total workforce projection for job growth (new positions) and replacement of the current workforce in nursing and allied health professions will require almost 12,000 people from 2004 to 2010. On a per annum basis through 2010, there is a need to recruit approximately 1,700 nurses and allied health professionals per year – 1,360 per year to cover new job growth and replacement of current nurses/nursing assistants and 340 allied health professionals per year.

Next Steps

This report was created to increase awareness of the future workforce needs of Delaware's acute care hospitals and health systems and will provide a basis for increased dialogue on the issue. The information will be shared with Governor Ruth Ann Minner and the members of her Administration, the members of the Delaware General Assembly, the Delaware Health Care Commission, and Delaware's Congressional Delegation. We will also provide the report to our colleges, universities, and private nursing schools who currently partner with Delaware's hospitals and health systems to assist them in their short-term and long-range capital and operational planning.

It also provides a basis to evaluate the current capacity of educational programs for nurses and allied health professionals in Delaware; it highlights the need for some programs to be expanded; and lastly it identifies (based on information available to us) those allied health profession programs that need to be established in Delaware to meet the projected workforce needs through 2010. The leaders of Delaware's acute care hospitals and health systems stand ready to partner with our colleges, universities, and private nursing schools to assist them as they develop strategies to meet these workforce needs.

Questions may be directed to Lisa M. G. Henry, Director of Health Policy, or Joseph M. Letnaunchyn, President and CEO, by calling the Delaware Healthcare Association at 302-674-2853, or directly by email (lisah@deha.org) or (joelet@deha.org).

Survey Criteria and Definitions 2003 - 2010

Survey Criteria

- People rather than full time equivalents.
- New Positions included full time, part time, and temporary employees necessary to meet growth projections.
- Turnover included full time, part time, and temporary employees. Turnover projections represented current and past trends.
- Recruitment needs equals the number of new employees necessary to staff new positions and replace terminated employees.

Definitions

- Cumulative Recruitment see definition for Projected Health Care Professionals Needed to Meet Changing Workforce 2004-2010
- Current Workforce the number of employees working at Delaware acute care hospitals and health systems in 2003.
- Estimated Number of 2003 Health Care Graduates from Delaware Training Programs, Colleges, and Universities

 numbers based on information provided by representatives of the educational programs.
- **Growth** the addition of new positions due to increased beds and services as well as increased utilization of services.
- Percentage Change in Projected Workforce 2004 2010 the difference between Current Workforce and Projected Workforce as of 2010 shown as a percentage.

- **Projected Delaware Graduates** estimated number of students graduating from Delaware training programs, Colleges, and Universities.
- Projected Health Care Professionals Needed to Meet Changing Workforce 2004-2010 Annual Recruitment needs to account for: turnover, including retirements; career changes; relocations; internal movement; promotions; resignations; internal movement between facilities in and out of state; and facility growth, which includes increase in number of beds and services. increase in utilization.
- Projected Increase in Workforce 2004 2010 the difference between Current Workforce and Projected Workforce as of 2010.
- Programs Offered in Delaware Colleges and Universities and Other Training Programs certificate, diploma, or degree offered at any training facility, two year or four year college, or university in Delaware.
- Projected Workforce Changes the number of health care professionals terminating or changing employment status due to retirement, relocation, career changes, internal movement, promotions, resignations, and movement between facilities in and out of state.
- Projected Workforce total employees for future years 2004-2010.
- Unmet Workforce Needs estimated number of health care professionals needed beyond current employees and current level of graduating students to meet 100 percent staffing at Delaware acute care hospitals and health systems.

Vacancies – the number of vacant positions at the end of 2003.

Workforce Needs at a Glance 2003 - 2010

| Discipline | Current Workforce 2003 Excluding Current Vacancies | Projected Workforce 2004 | Projected Workforce 2010 | Projected Increase in Workforce 2003-2010 | Percentage Change in Projected Workforce 2003-2010 | Projected Health Care Professionals Needed to Meet Changing Workforce 2004-2010* | Estimated Number of 2003 Health Care Graduates from Delaware Colleges, Universities and Other Training Programs (Not All of Whom Practice in Delaware) |
|--------------------------------------|--|--------------------------------|--------------------------------|--|--|--|---|
| Registered Nurse | 4800 | 5187 | 6876 | 2076 | 43.25% | 6994 | 350 |
| Licensed Practical Nurse | 370 | 390 | 488 | 118 | 31.89% | 568 | 117 |
| Nurse Assistant | 1085 | 1169 | 1585 | 500 | 46.08% | 2002 | 912 (tested for certification) 500 (passed certification exam) |
| Pharmacist** | 129 | 136 | 177 | 48 | 37.21% | 156 | |
| Pharmacy Technician | 143 | 144 | 177 | 34 | 23.78% | 177 | *** |
| Operating Room Technician** | 133 | 138 | 188 | 55 | 41.35% | 176 | |
| Radiologic Technologist | 220 | 249 | 318 | 98 | 44.55% | 349 | 13 |
| Cardiovascular Technologist** | 39 | 40 | 60 | 21 | 53.85% | 65 | |
| Nuclear Medicine Technologist | 37 | 37 | 53 | 16 | 43.24% | 51 | 10 |
| Ultrasound Technologist | 63 | 70 | 95 | 32 | 50.79% | 103 | 12 |
| MRI Technologist** | 51 | 52 | 73 | 22 | 43.14% | 78 | |
| Medical Technologist | 292 | 296 | 345 | 53 | 18.15% | 260 | 37 |
| Respiratory Therapist | 266 | 275 | 346 | 80 | 30.08% | 298 | 18 |
| Physical Therapist | 138 | 141 | 180 | 42 | 30.43% | 156 | |
| Physical Therapist Assistant | 57 | 57 | 72 | 15 | 26.32% | 70 | 5 |
| Radiation Therapist** | 24 | 26 | 40 | 16 | 66.67% | 41 | |
| Home Health Aide | 235 | 236 | 283 | 48 | 20.43% | 226 | |
| Social Worker (Home Health) | 15 | 15 | 17 | 2 | 13.33% | 9 | |
| Occupational Therapist (Home Health) | 8 | 10 | 11 | 3 | 37.50% | 17 | |
| Physical Therapist (Home Health) | 41 | 43 | 50 | 9 | 21.95% | 42 | |
| Speech Therapist (Home Health) | 8 | 9 | 10 | 2 | 25.00% | 9 | |

^{*}Includes – employment due to retirements, relocations, career changes, internal movement/promotion, resignations, movement between facilities, facility growth, such as an increase in number of beds and services, and increased utilization. **Not offered at a Delaware College, University, or other training program. *** Data not available.

Educational Offerings

| Registered Nurse Registered Nurse BMCNS, DSU, DTW, DTT, DTO, UD, WC Licensed Practical Nurse DTT, DTO, DSC, DHS Nurse Assistant Multiple sites other than colleges and universities with the exception of DTT Pharmacist** Pharmacy Technician PT Operating Room Technician** Radiologic Technologist DTW Cardiovascular Technologist DTW Ultrasound Technologist DTW MRI Technologist* Medical Technologist DTO, UD Respiratory Therapist Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** Speech Therapist (Home Health)** | | |
|---|--|-----------------------------------|
| Licensed Practical Nurse Nurse Assistant Multiple sites other than colleges and universities with the exception of DTT Pharmacist** Pharmacy Technician PT Operating Room Technician** Radiologic Technologist DTW Cardiovascular Technologist* Nuclear Medicine Technologist DTW Ultrasound Technologist DTW MRI Technologist** Medical Technologist DTO, UD Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist Assistant Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** | Disciplines | |
| Nurse Assistant Multiple sites other than colleges and universities with the exception of DTT Pharmacist** Pharmacy Technician PT Operating Room Technician** Radiologic Technologist DTW Cardiovascular Technologist** Nuclear Medicine Technologist DTW Ultrasound Technologist DTW MRI Technologist** Medical Technologist DTO, UD Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** | Registered Nurse | BMCNS, DSU, DTW, DTT, DTO, UD, WC |
| Pharmacist** Pharmacy Technician PT Operating Room Technician** Radiologic Technologist DTW Cardiovascular Technologist** Nuclear Medicine Technologist DTW Ultrasound Technologist MRI Technologist Medical Technologist DTO, UD Respiratory Therapist Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** | Licensed Practical Nurse | DTT, DTO, DSC, DHS |
| Pharmacy Technician Operating Room Technician** Radiologic Technologist DTW Cardiovascular Technologist** Nuclear Medicine Technologist DTW Ultrasound Technologist MRI Technologist** Medical Technologist DTW, DTO Respiratory Therapist Physical Therapist Assistant Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** | Nurse Assistant | |
| Operating Room Technician** Radiologic Technologist Cardiovascular Technologist** Nuclear Medicine Technologist DTW Ultrasound Technologist MRI Technologist* Medical Technologist DTW, DTO Respiratory Therapist Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** | Pharmacist** | |
| Radiologic Technologist Cardiovascular Technologist** Nuclear Medicine Technologist DTW Ultrasound Technologist MRI Technologist** Medical Technologist DTO, UD Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** | Pharmacy Technician | PT |
| Cardiovascular Technologist** Nuclear Medicine Technologist DTW Ultrasound Technologist MRI Technologist** Medical Technologist DTO, UD Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** | Operating Room Technician** | |
| Nuclear Medicine Technologist Ultrasound Technologist MRI Technologist** Medical Technologist DTO, UD Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** | Radiologic Technologist | ртw |
| Ultrasound Technologist MRI Technologist** Medical Technologist DTO, UD Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist Assistant Home Health Aide** Social Worker (Home Health)** Physical Therapist (Home Health)** Physical Therapist (Home Health)** | Cardiovascular Technologist** | |
| MRI Technologist** Medical Technologist DTO, UD Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist UD Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Nuclear Medicine Technologist | υτω |
| Medical Technologist Respiratory Therapist DTW, DTO Radiation Therapist** Physical Therapist UD Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Ultrasound Technologist | WTD |
| Respiratory Therapist Radiation Therapist** Physical Therapist UD Physical Therapist Assistant Home Health Aide** Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | MRI Technologist** | |
| Radiation Therapist** Physical Therapist UD Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Medical Technologist | DTO, UD |
| Physical Therapist UD Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Respiratory Therapist | DTW, DTO |
| Physical Therapist Assistant DTW, DTO Home Health Aide** Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Radiation Therapist** | |
| Home Health Aide** Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Physical Therapist | UD |
| Social Worker (Home Health)** Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Physical Therapist Assistant | DTW, DTO |
| Occupational Therapist (Home Health)** Physical Therapist (Home Health)** | Home Health Aide** | |
| Physical Therapist (Home Health)** | Social Worker (Home Health)** | |
| | Occupational Therapist (Home Health)** | |
| Speech Therapist (Home Health)** | Physical Therapist (Home Health)** | |
| | Speech Therapist (Home Health)** | |
| | | |

Key

BMCSN = Beebe Medical Center School of Nursing

DSU = Delaware State University

DTW = Delaware Technical & Community College, Wilmington Campus

DTT = Delaware Technical & Community College, Terry Campus

DTO = Delaware Technical & Community College, Owens Campus

DSC = Delaware Skills Center

DHS = Delcastle Vo-Tech High School

PT = Polytech School District - Adult Education

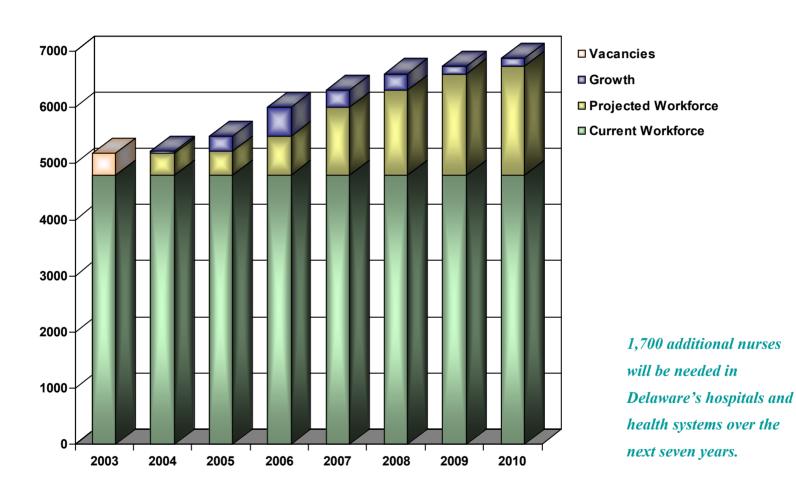
UD = University of Delaware

WC = Wesley College

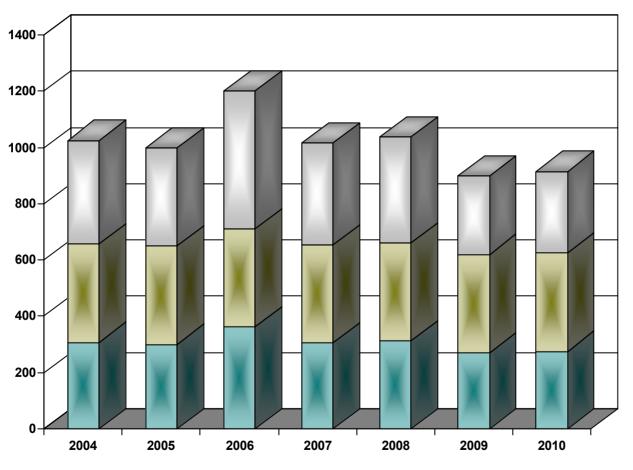
^{**}Not offered at a Delaware College, University, or other training program.



Workforce Needs 2003 - 2010 Registered Nurse



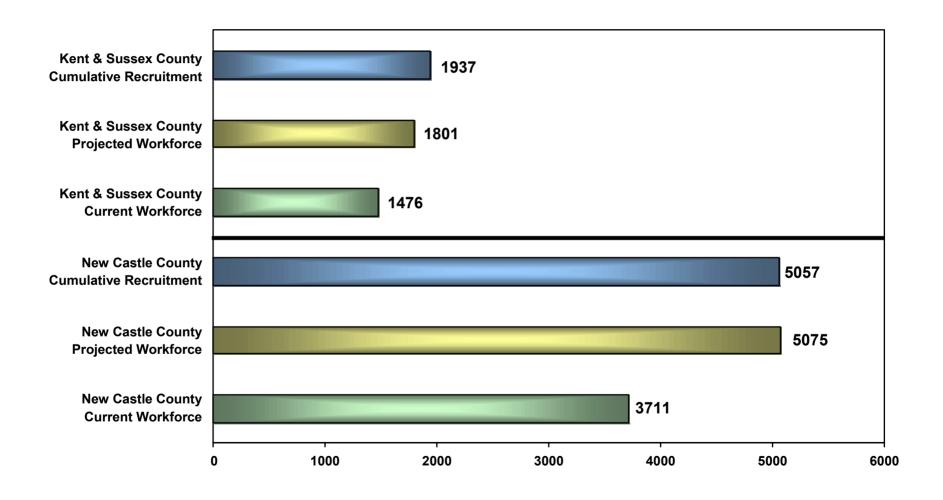
Recruitment Needs 2004 - 2010 Registered Nurse



- ☐ Unmet Workforce Needs
- Projected Delaware Graduates
- **Projected Workforce Changes**

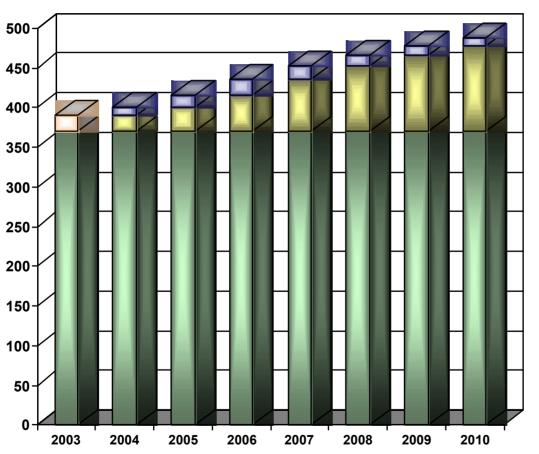
Delaware's educational facilities currently do not have the capacity to meet the increased demand for registered nursing students.

Workforce Needs By County Registered Nurse



Licensed Practical Nurse

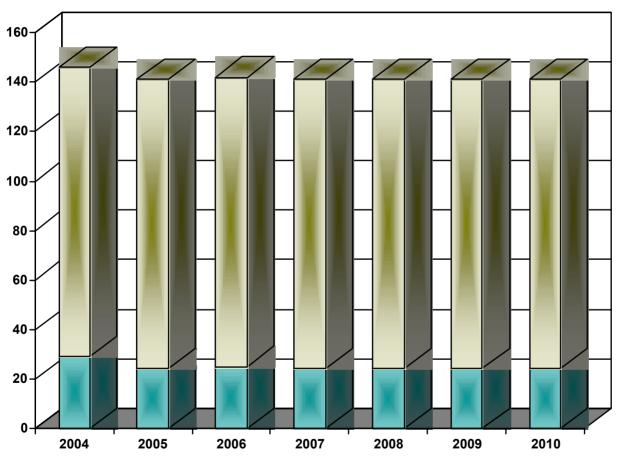
Workforce Needs 2003 - 2010 **Licensed Practical Nurse**



- □Vacancies
- **■** Growth
- **■** Projected Workforce
- **□** Current Workforce

There is a projected need for 125 new Licensed Practical Nurses to be added to our hospital and health system workforce.

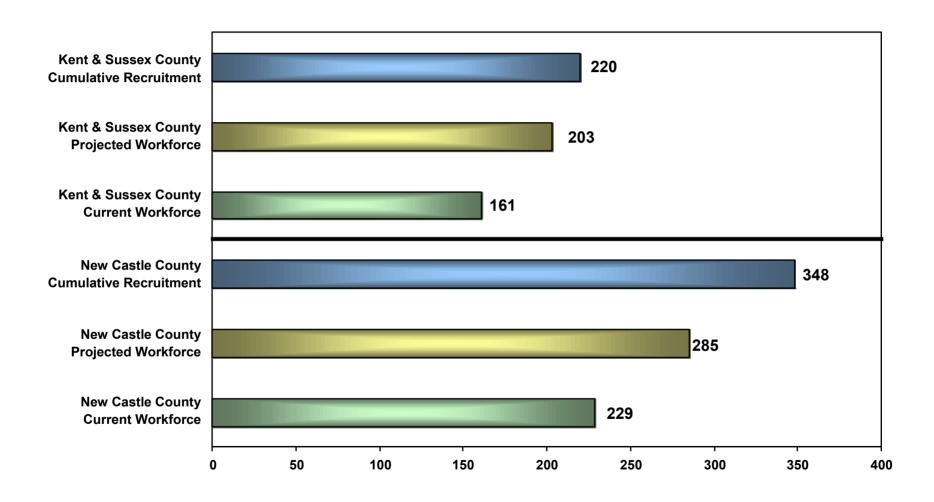
Recruitment Needs 2004 - 2010 **Licensed Practical Nurse**



- **Projected Delaware Graduates**
- Projected Workforce Changes

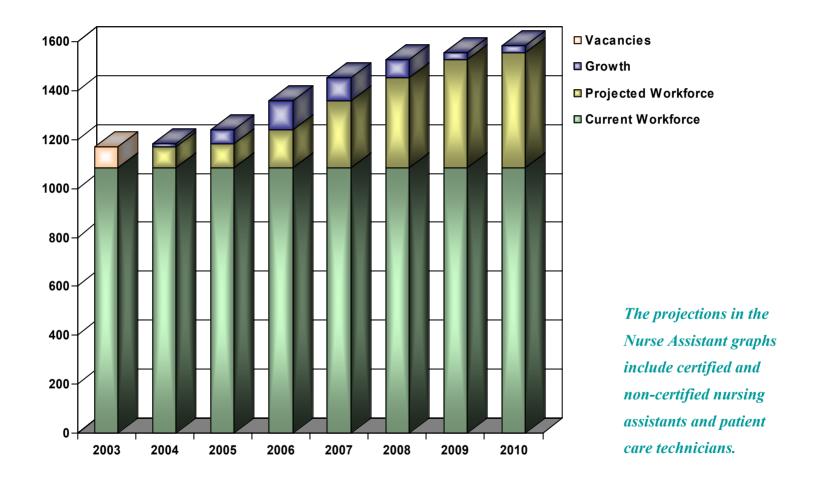
This graph illustrates zero unmet need for hospitals & health systems, however it is unrealistic to assume that all LPN graduates would choose to work in these facilities rather than other health care settings.

Workforce Needs By County Licensed Practical Nurse

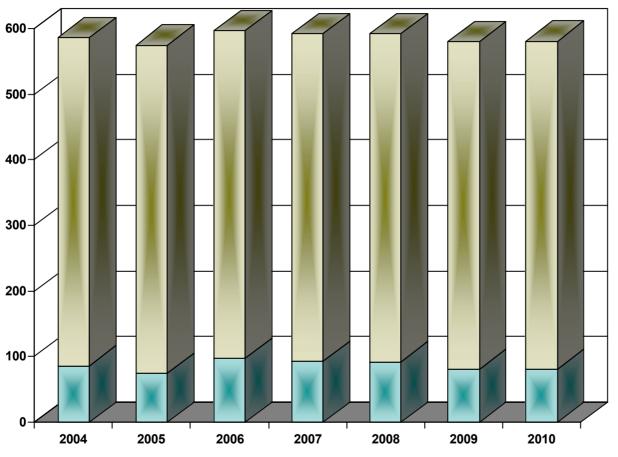


Nurse Assistant

Workforce Needs 2003 - 2010 **Nurse Assistant**



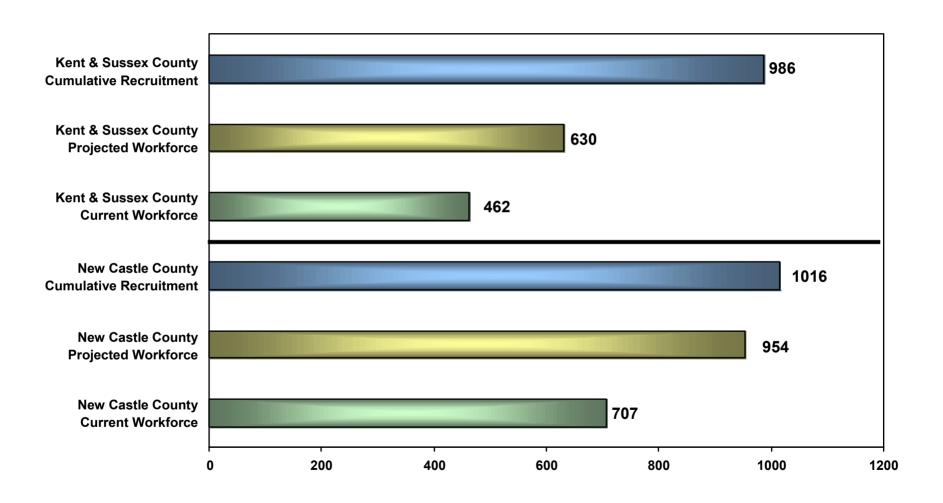
Recruitment Needs 2004 - 2010 **Nurse Assistant**



- **Projected Delaware Graduates**
- Projected Workforce Changes

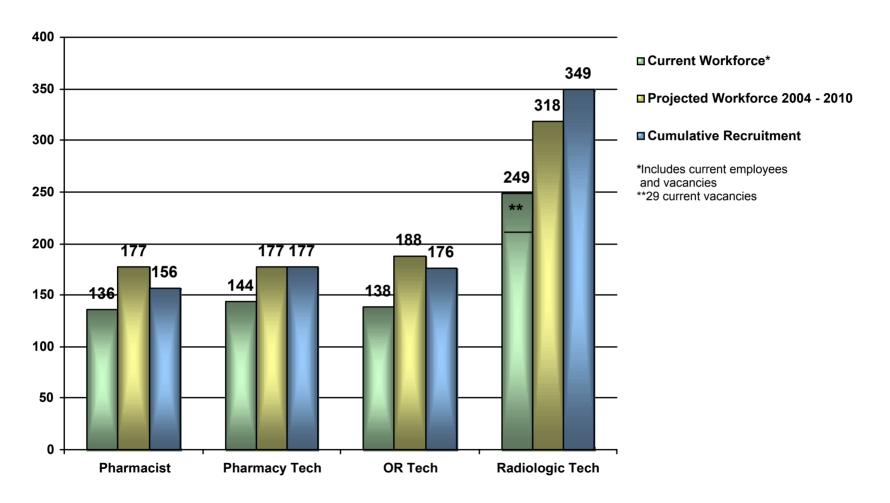
This graph also illustrates zero unmet need for hospitals & health systems, however it is unrealistic to assume that all Nurse Assistant graduates would choose to work in these facilities rather than other health care settings.

Workforce Needs By County Nurse Assistant



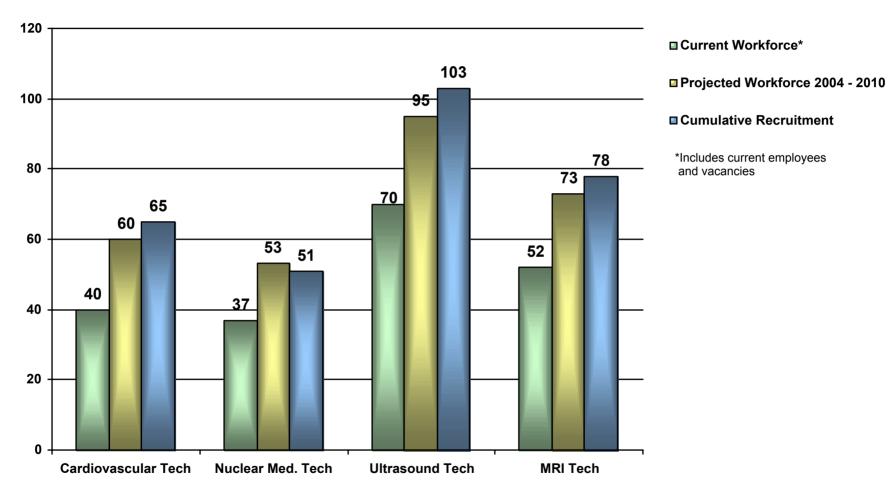
Allied Health Professionals

Workforce Needs 2003 - 2010 Allied Health Professionals



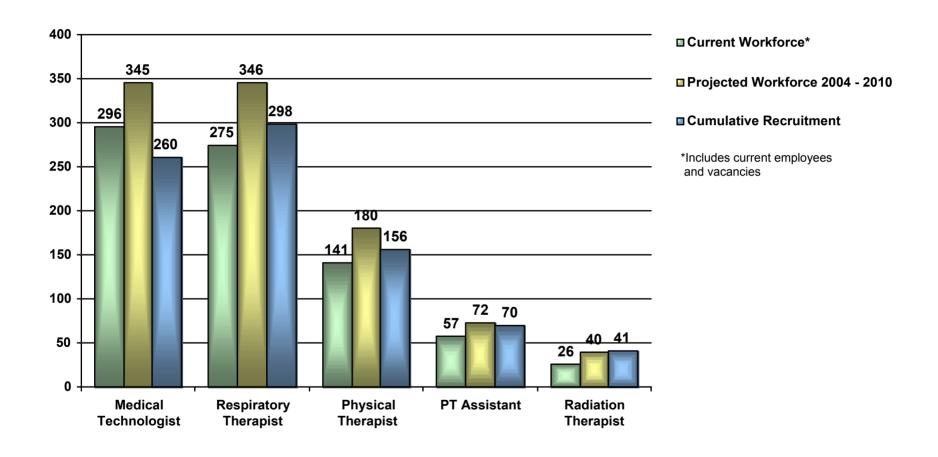
Approximately 20-25% of the above recruitment needs relates to Allied Health Professionals moving between facilities.

Workforce Needs 2003 - 2010 Allied Health Professionals



Approximately 20-25% of the above recruitment needs relates to Allied Health Professionals moving between facilities.

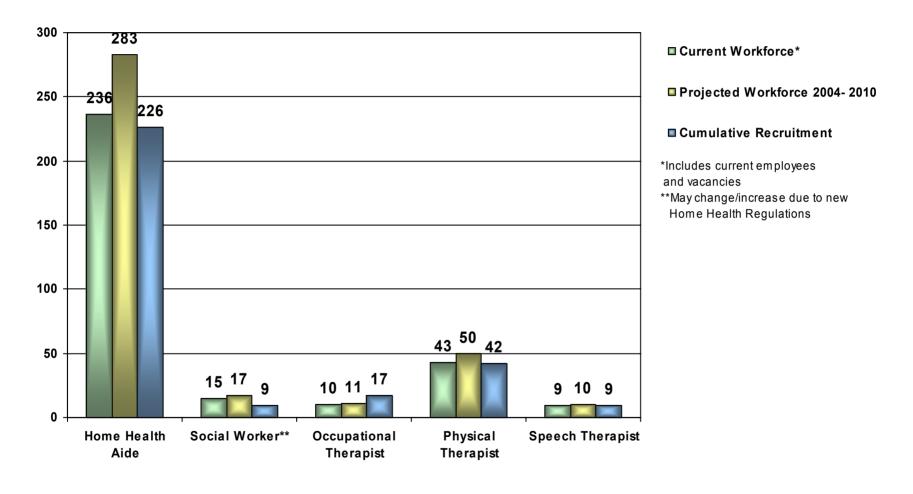
Workforce Needs 2003 - 2010 Allied Health Professionals



Approximately 20-25% of the above recruitment needs relates to Allied Health Professionals moving between facilities.

Home Health Care Professionals

Workforce Needs 2003 - 2010 Home Health Care Professionals



Approximately 20-25% of the above recruitment needs relates to Home Health Professionals moving between facilities.



Delaware Healthcare Association

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