

REPORT AND RECOMMENDATIONS OF THE OMNE TASK FORCE

**2002 OVERVIEW OF MAINE'S NURSING
AND HEALTH CARE WORKFORCE**

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At the directive of the Health and Human Services Committee, OMNE, Nursing Leaders of Maine, convened interested parties to meet and review LD 1085 Resolve, To Improve Staffing in Healthcare Settings and LD 1346, Resolve, To Establish a Commission to Study the Healthcare Workforce Shortage. Representatives from the following organizations were invited to participate: ANA-Maine, Maine Hospital Association, Maine Medical Association, Maine Society for Healthcare Human Resources Administration, Maine State Board of Nursing, Maine State Board of Medicine, Maine State Department of Human Services Division of Licensing and Certification, Maine State Nurses Association, Nurse Educators, Nurse Practitioners of Maine, Sweetser, and additional individuals who testified during hearings. Thirteen meetings were held between July 19, 2001, and March 13, 2002. As a result of these meetings the following overview of Maine's nursing and health care workforce is provided. It is hoped that this document and the recommendations within will be used as a resource and reference as Maine addresses its workforce shortage.

The Nursing Workforce in Maine

Data on the extent of the nursing shortage in Maine historically has been fairly limited. This is of great concern to those who are forecasting supply and demand in order to take appropriate action. According to the most recent federal information (U.S. Department of Health and Human Services Bureau of Health Professions, 2000), there were 15,507 registered nurses (RNs) in Maine in 1996, of whom 84% were employed in nursing. In 1996, Maine had 1,051 RNs per 100,000 population in comparison to the national average of 798. The number of RNs increased 36% between 1988 and 1996, while the population of the state grew only 3%. In addition, between 1992 and 1998 the number of inpatient days declined 2% while the number of full-time equivalent RNs working in hospitals increased 14%. This resulted in a 53% increase in the ratio of full-time equivalent RNs to inpatient days in Maine, while the nationwide increase was only 26%.

The nursing shortage in Maine is current and quantifiable. For example, as will be discussed later, the number of unfilled RN positions in Maine hospitals has increased by 40% since September 2000. In fact, Maine hospitals are currently reporting an overall vacancy rate of 9.4% for nursing positions (Maine Hospital Association, September 2001). More significantly, according to Maine Hospital Association's Long Term Care Workforce survey (October, 2001), the vacancy rate for nursing home RNs has increased by 71%. Today, 18.6% of nursing positions in long-term care are unfilled.

There is increasing concern that the shortage will grow. First, Maine's Department of Labor projects that there will be 2,676 new RN positions by 2008 (Evans, 2000). This number does not include current positions that will remain unfilled due to retirements or inability to recruit successfully. Second, while Maine's population has remained relatively stable, the percentage of elderly persons is substantial. In 2000, 14% of Maine's population was 65 years of age or older, which is the 10th highest percentage in the nation, and compares to 12% in New Hampshire, 13% in Vermont, and 12% nationally (U.S. Census Bureau, 2001). The elderly are represented disproportionately in health care settings, particularly in hospitals. Although hospital admissions in Maine declined 3.9% for persons under the age of 65 between 1994 and 1999, they increased 8.6% for persons aged 65 or older, 13.7% for persons aged 75 to 84, and 24.3% for persons aged 85 and older (Maine Hospital Association, November 2000). Third, Maine has an aging nursing

workforce. In the 2000 Maine Hospital Association survey 45% of hospital nurses and 50% of nurses in continuing care were aged 45 and older, 10% (hospital) and 15% (continuing care) were aged 55 to 62, and 2% (hospital) and 4% (continuing care) were aged 62 or older.

The Supply of Registered Nurses in Maine

In an overview specific to Maine's workforce, the Maine State Board of Nursing had 22,482 active RNs and LPNs on its active roster as of December 2001. It is important to note that "active" does not assure that the nurse is working, nor does it mean that the nurse is working in the State of Maine. Many nurses maintain licenses in multiple states. Additionally, there were 15,020 individuals recorded as inactive. Very little is known about individuals on the inactive list, except that they at one point held active licenses in the State of Maine.

In 2001 a focused three-month survey specific to nursing was conducted as part of a pilot study for the purposes of gathering data for inclusion in this report. A total of 3,103 surveys were completed from September 1, 2001, to November 30, 2001, a sample that represents roughly 14% of the total nursing workforce with active licenses in Maine. RNs and LPNs who were due to renew their license were sent a brief survey along with their renewal application. Participation was voluntary and individuals were instructed to return the completed survey with their renewal materials. Completed surveys were separated from the renewal materials and forwarded to the University of Southern Maine for analysis (Kirschling, Broadway, & Vines, 2001). The overwhelming majority of individuals returned the survey. This is an important finding because concern has previously been expressed about requiring individuals to complete demographic information in order to be relicensed. Based on this pilot study, future efforts to secure legislative approval for collecting and analyzing ongoing data should emphasize a voluntary system.

As noted in Table 1, the average age of active RNs and LPNs in Maine was 46.6 in 2001. Active RNs and LPNs who were not working (mean age 54.0 years) were on average 8.7 years older than the active LPNs and RNs who were working (mean age 45.3 years).

Table 1. 2001 Age Comparisons for Inactive and Active Nurses in Maine

Age in Years	Inactive LPNs and RNs Number 15,020	Active LPN and RN Sample Number 3,087	Active Sample Working as a Nurse Number 2,615	Active Sample Not Working as a Nurse Number 472
20 to 31	2%	8%	9%	2%
32 to 41	9%	20%	22%	11%
42 to 51	27%	38%	40%	26%
52 to 61	18%	25%	24%	29%
62 to 71	13%	8%	6%	24%
72 to 81	14%	1%	.6%	7%
82 to 91	10%	.1%	.0%	.4%
92 to 101	7%	-	-	-
Average Age	-	46.6 years	45.3 years	54.0 years

The primary counties in which Maine RNs and LPNs work are noted in Table 2. The majority of RNs work in Cumberland, Penobscot, and Kennebec Counties. The majority of LPNs work in Cumberland, Penobscot, Androscoggin, and Aroostook Counties. Nine percent of the RNs are

working out of state, and fewer than 1% are working out of the country. In addition, 3% of the LPNs are working out of state.

Table 2. Primary County in Which Maine’s LPNs and RNs Work

Primary Country	% LPNs Working in Maine Number 308	% RNs Working in Maine Number 1906
Androscoggin	12.3	9.1
Aroostook	12.8	5.0
Cumberland	19.6	29.4
Franklin	2.3	1.9
Hancock	5.2	2.4
Kennebec	9.4	11.4
Knox	2.6	3.9
Lincoln	1.9	1.6
Oxford	3.2	2.4
Penobscot	13.4	13.4
Piscataquis	1.6	1.2
Sagadahoc	1.9	1.1
Somerset	3.2	1.9
Waldo	.6	1.8
Washington	1.9	1.5
York	7.8	8.8
Multiple Counties	.3	3.2

As noted in Table 3, the majority of nurses who are currently working indicated that they planned to be working in 5 years (76%). Not surprisingly, nurses who are currently working and are over the age of 51 years were less likely to say for sure that they would be working in 5 years. RNs over 51 years of age who are currently working were the most uncertain (30%) about whether they would be working in 5 years. Of the nurses who are currently not working, only 20% of the LPNs and 35% of the RNs said they would not be working in 5 years.

Table 3. LPNs and RNs: Plans To Be Working in Nursing in 5 Years

	Yes	No	Uncertain
LPNs currently working in nursing (number 340)	76%	4%	19%
• Age 51 years or younger (number 215)	80%	2%	18%
• Over age 51 years (number 122)	71%	8%	21%
RNs currently working in nursing (number 2,279)	76%	5%	19%
• Age 51 years or younger (number 1,614)	83%	3%	14%
• Over age 51 years (number 657)	59%	11%	30%
LPNs not currently working in nursing (number 104)	16%	20%	64%
RNs not currently working in nursing (number 347)	19%	35%	46%

Licensed practical nurses in Maine. LPNs who are working are 48.0 years old on average (range 20 to 79) in contrast to LPNs who are not working, who are 53.8 years of age on average (range 35 to 80). A total of 76% of the LPNs reported working as a nurse. Of the LPNs working as a nurse, 69% reported working full time. The most frequent place of work was long-term care (38%), followed by ambulatory settings (26%), hospitals (19%), home care (8%), and mental health setting (8%). Nine percent of LPNs work in one more than setting.

Registered nurses in Maine in contrast to national data. A total of 87% of the Maine sample of RNs reported working as a nurse. This is in contrast to 82% of RNs nationally who reported being employed in nursing (U.S. Department of Health and Human Services Bureau of Health Professions, 2000). Of the Maine RNs working as a nurse, 69% reported working full time and 31% reported working part time. In contrast, 72% of RNs nationally were working full time and 28% were working part time in 2000. The most frequent place of work for the Maine sample was the hospital (50%), followed by 22% for other settings such as ambulatory, school nursing, and nursing education; 9% for long-term care; 9% for home care; and 6% for mental health. Nationally, 59% of RNs were working in hospitals in 2000. The majority of RNs reported working in one setting (86%). An additional 12% reported working in two settings, and 1% reported working in three settings. In relation to gender, 5.9% of RNs nationally were male, in contrast to 6.7% of RNs in Maine.

Nearly 28% of the nurses in Maine are under age 40. This compares to 32% nationally (see Table 4). In Maine, 18% of RNs are under age 35 and 7.3% are under the age of 30.

Table 4. Age Categories of All Registered Nurses, Nationally in 1980 and 2000 (HRSA, 2001) and in Maine in 2001

Age	Nationally 1980	Nationally 2000	Maine 2001 RN Sample
Under age 40	52.9%	31.7%	27.6%
Under age 35	40.5%	18.3%	18.2%
Under age 30	25.1%	9.1%	7.3%

Maine RNs who were working in 2001 were 44.9 years of age on average (range 22 to 83), in contrast to RNs who were not working, who averaged 53.8 years of age (range 22 to 86). Nationally, RNs who were working averaged in 2000 43.3 years of age (U.S. Department of Health and Human Services Bureau of Health Professions, 2000). Further analysis of the age of the RN population demonstrates that the workforce is aging, in part due to the large number of nurses from the baby boom generation.

Maine’s Nursing Education Programs

Nursing students in Maine. Trend data on nursing enrollments and graduations in Maine’s 13 nursing programs were collected last spring and updated this fall (Kirschling, 2002; see Table 5). It is important to note that Maine’s nursing education programs produced 425 graduates in 2000-2001. This number falls well short of the projected demand for RNs (see information below).

The nursing program respondents were asked about plans for expansion. As of this academic year, Southern Maine Technical College is admitting a new class in the fall and spring semesters (an addition of 34 students) and Central Maine Technical College admitted 6 additional associate’s degree students with one-time outside funding. Within Maine’s Technical College System, additional expansion is dependent on procurement of funds. Within the University of Maine System, the University of Maine, University of Maine at Fort Kent, and University of Southern Maine do not have enrollment caps for their generic baccalaureate programs; however,

maintaining open enrollments will increasingly be dependent on additional financial support for full-time faculty.

Table 5. Nursing Enrollments and Graduations: Maine’s Associate’s and Generic Baccalaureate Degree Programs

	1998-1999	1999-2000	2000-2001	Percent Change 1998-1999 to 2000-2001
Enrollments ¹				
Associate’s Degree	473	492	537	13.5%
Baccalaureate Degree	812	861	805	-.9%
Total	1285	1353	1342	
Graduations				
Associate’s Degree	264	221	241	-8.7%
Baccalaureate Degree	210	204	184	-12.4%
Total	474	425	425	

Maine nursing faculty profile. In fall 2001 the State’s 13 nursing programs employed 128.6 full-time nursing faculty (range 5 to 24 FTEs). The majority of nursing faculty are female and Caucasian (127). Five programs have males on their faculty ranging from 1-2 male faculty members.

For further analysis, the 13 programs were broken down into those that currently admit students to an associate’s degree program as the terminal degree for preparation as an RN (8 programs) and those that offer a generic baccalaureate degree program as the terminal degree for preparation as an RN (5 programs). Table 6 provides an overview of full-time faculty members’ highest degree and rank. Three programs with full-time faculty vacancies expressed concern about the overall lack of applicants for the vacant positions. Current and projected vacancies for full-time faculty are also provided. Table 7 provides a breakdown of full-time faculty by age.

Nursing programs were also asked about their use of part-time nursing faculty and difficulties they have experienced in hiring part-time faculty. Seven of the associate’s degree programs and 2 of the generic baccalaureate degree programs indicated that they had difficulty hiring part-time faculty. Reasons cited for the difficulty included: (a) having trouble finding qualified people with the Master’s in Nursing credential and (b) lower than market salaries for a master’s-prepared nurse. Additional information on part-time faculty is provided in Table 8.

The demand and vacancy rates for nurses in Maine. According to the Maine Department of Labor, there will be a projected gain of 2,676 new RN positions by 2008 in contrast to 1998 (Evans, 2000). The growth rate in new jobs will be compounded by the need to replace nurses who reach retirement age or choose to leave the profession. The Maine Chamber of Commerce recently surveyed hospitals, long-term care facilities, and home health care services and found that 1,584 additional LPNs and RNs will be needed by the end of 2002 (Committee to Address the Health Care Skilled Worker Shortage, 2001).

¹ Enrollment numbers in generic baccalaureate degree programs reflect students enrolled as freshmen, sophomores, juniors, and seniors, in contrast to associate’s degree numbers, which reflect 1st year and 2nd year students.

Table 6. Maine's Nursing Programs: Full-Time Faculty Profile and Vacancies

	Associate's Degree (8 programs)	Generic Baccalaureate Degree (5 programs)
Full-time nursing faculty	6 to 15, total 65.6 ²	5 to 24, total 63 faculty
<i>Full-Time Faculty Highest Degree</i>		
Doctorally prepared in nursing	3 (5%)	19 (31%)
Doctorally prepared in other field	3 (5%)	14 (22%)
Master's prepared in nursing	56.6 (86%)	29 (46%)
Master's prepared in other field ³	2 (3%)	-
Bachelor's prepared in nursing ¹	1 (1.5%)	1 (1.6%)
<i>Full-Time Faculty Rank⁴</i>		
Professor	1 (1.5%)	4 (6%)
Associate Professor	7 (11%)	30 (48%)
Assistant Professor	15 (23%)	19 (30%)
Lecturer/Instructor	8 (12%)	10 (16%)
Other	34.6 (53%)	-
<i>Full-Time Faculty Vacancies</i>		
Current vacancies (fall 2001)	2 programs, 2.5 FTEs	3 programs, 3 FTEs
Projected vacancies end (2001-2002)	1 program, 1 FTE	1 program, 1 FTE

Table 7. Maine's Nursing Faculty: Age Distribution, Fall 2001

	Associate's Degree (8 programs)	Generic Baccalaureate Degree (5 programs)
30 years of age or younger	-	2 (3%)
31 to 40 years of age	5.6 (9%)	7 (11%)
41 to 50 years of age	28 (43%)	18 (29%)
51 to 60 years of age	24 (37%)	29 (46%)
61 to 65 years of age	7 (11%)	7 (11%)
66 years of age or older	1 (1.5%)	-

Table 8. Maine's Nursing Programs: Part-Time Faculty

	Associate's Degree (8 programs)	Generic Baccalaureate Degree (5 programs)
Number fall 2001	24	58
• Number non-nurse	-	3
<i>Part-Time Faculty: Teaching Areas</i>		
Didactic Courses	-	21 (36%)
Clinicals	20 (83%)	26 (45%)
Both	4 (17%)	11 (19%)

According to the Maine Hospital Association (September 2001) roughly 6,200 RNs make up about 28% of the total hospital workforce in Maine. Between 2000 and 2001 there was a 40% increase in RN vacancies (6.7% in 2000 versus 9.4% in 2001). Sixty-eight percent of the hospitals reported that short staffing was affecting access. Over 40% of the hospitals reported

² Within the Maine Technical College System, faculty who are three-fifths time receive full benefits and are considered full time.

³ Requires exemption from Maine State Board of Nursing.

⁴ The Technical College System does not use "rank" with faculty; all are classified as "other."

reduced inpatient capacity and experienced overcrowding in the emergency department due to staffing shortages. In 2000, the Maine Hospital Association reported that nursing retention was also a major issue. The average turnover rate for Maine hospitals was 11% compared to 15% nationally (Maine Hospital Association, November 2000).

In addition, the 19 freestanding nursing homes and 9 hospital-based nursing homes that are operated by Maine's community hospitals reported a 71% increase in the vacancy rate for RNs over the past year: 10.9% in 2000 versus 18.6% in 2001 (Maine Hospital Association, October 2001). These 28 facilities represent 20% of the licensed nursing home beds in the state. Most of these facilities had to resort to temporary staffing agencies, or travelers, to fill RN positions. In 2000, the incidence of Maine's contract labor usage was nearly twice the national average for RNs (Maine Hospital Association, October 2001).

Data from a survey on private duty home care workers provided for the Home Care Alliance of Maine reveal that home care providers are seeking to fill vacancies in private duty home-care staff on a weekly basis (Fazzi and Associates, 2001). Private duty home care workers provide home care services to the state-funded home care programs managed by the bureau of Elder and Adult Services, which include Private Duty Nursing, Medicaid Waiver, Home Based Care, and Services for Adults with Disabilities. Each week there are vacancies in agencies providing services in the more populated southernmost counties of Maine: York, Cumberland, Androscoggin, and Sagadahoc Counties. Seventy-three percent of vacancies reported are for nursing assistants and personal care attendant positions. The survey respondents turned down or wait listed nearly 200 new patients a week because of staff shortages. The shortfall in services not provided to existing patients totaled over 5,000 hours per week. Based on a statewide average workweek of 17 hours per private duty home care provider, there is an estimated shortage of over 300 private duty home care workers.

Finally, data specific to mental health indicates that staff recruitment and retention issues plague Maine's community mental health system, frequently resulting in unacceptably long waiting lists for treatment and services. The results of a recent survey indicated an overall 29% turnover rate among the four lowest paid classifications of direct care employees: Independent Living Skills Specialists/Residential Service Workers (32%), Community Support Workers (30%), Crisis Program Workers (21%), and Case Managers/Community Support Workers (21%). Over 65% of these workers were at or below 150% of the 2000 Federal Poverty Level. Clearly, depressed salaries and high turnover rates are key indicators of a compromised workforce (Maine Association of Mental Health Services, 2000).

The Allied Professionals Workforce in Maine

Data on the shortage of allied health care personnel are limited, but licensing boards, professional organizations, and educational facilities were surveyed recently (Whitehead, 2001). The following ancillary positions were included: cardiovascular technicians, laboratory technicians, occupational therapists, occupational therapy assistants, pharmacists, pharmacy technicians, physical therapists, physical therapy assistants, radiation therapists, radiology technicians, social workers, and speech therapists.

Letters of inquiry were sent to 17 colleges, 11 licensing boards, and 10 professional organizations. From the 11 licensing boards, surveys were returned for occupational therapists, physical therapists, physical therapy assistants, and respiratory therapists. Most indicated that the data collected by those boards are limited to name, address, birth date, gender, and active versus inactive status.

Only two of the professional organizations – those representing laboratory technologist and speech and language therapists – responded to the survey. Both respondents indicated an ongoing shortage of personnel in these professions, although the available data are not specific to Maine.

Perhaps most disturbing is the information about educational program availability. The 17 surveys that were mailed generated 9 responses. Of these 9, only 6 schools indicated that they provide programs in allied health professions. Graduations from these programs are listed in Table 9.

Table 9. Allied Health Professions: Graduations

Profession	1998	1999	2000	2001	Length of Program
Physical Therapy	0	0	34	20	5 years
Occupational Therapy (new program in 2000)	0	0	0	0	5 years
Speech Therapy	20	17	7	11	
Social Work	25	25	25	25	Bachelor's
Social Work	28	28	28	28	Master's
Radiation Technician (3 programs)	20	25	23	23	2 years
Cardiovascular Technician	7	10	6	3	2 years
Occupational Therapy Assistant	15	17	11	14	2 years
Physical Therapy Assistant	12	14	8	5	2 years
Radiation Therapist	3	5	3	3	2 years

Although these data may not be complete, the survey response indicates a need to have better data with which to plan for the future. Additional information on allied health professional programs and demand is available in the report by the Committee to Address the Health Care Skilled Worker Shortage (October 2001).

Factors Affecting the Health Care Workforce

Factors behind the shortage of nurses are numerous and complex. First, the workforce is aging. While no one can predict with absolute certainty, the data indicate that a mass exodus of nurses could occur within the next 10 years. Second, women today are able to pursue many competitive, attractive, and lucrative careers that were closed to them in years past. Third, the emergence of managed care led to reduced reimbursement and decreased acute care utilization. As a result, hospitals responded by introducing cost reduction and efficiency measures, entered into partnerships, reorganized, and redesigned practice models. Also, fewer people applied to nursing programs and fewer faculty were hired. Fourth, along with the increase in alternative careers, nursing is increasingly perceived as a less desirable career choice. Working conditions that

include evening, night, and weekend shifts, exposure to infectious diseases, and reduced time for direct patient care make nursing a less attractive career choice.

The February 2001 American Nurses Association national staffing survey of 7,300 nurses revealed that

- 56% of the RNs surveyed believed their time available for direct patient care had decreased within the past two years.
- 76% said that they had experienced an increase in patient care load, resulting in a dramatic decrease in the quality of care provided to each patient.
- 75% of the nurses indicated that the quality of nursing care had declined in their work setting and cited examples including inadequate staffing, delay in providing basic care, and discharge of patients without adequate information to continue their care.
- 49% said they felt exhausted and discouraged when they left work; nurses reported skipping meals and breaks to care for patients, increased pressure to accomplish work, forced overtime, the inability to attend in-service continuing education programs, and increased stress-related illness.
- 41% said they would not feel confident having someone close to them receive care in the facility in which they worked.
- Almost 55% said they would not recommend the nursing profession as a career for their children or friends, and 23% said they would actively discourage someone close to them from entering the profession.

Regulation is another area that is attracting growing concern. Whether a nurse works in a hospital, nursing home, or home care setting, the amount of time and energy spent documenting what is or is not done is enormous. Documentation for the purpose of satisfying regulations is inefficient use of a care provider's time. When less time is devoted to bedside care, and more time is spent on regulatory paperwork, recruiting and retaining experienced, caring professionals – not to mention attracting future health care workers – become difficult.

Certainly some paperwork makes sense. But the following are only a few examples of the regulatory burden that impacts nurses and their desire to go into or remain in nursing (American Hospital Association, May 2001):

- A Medicare patient arriving at the emergency department is required to review and sign eight different forms – just for Medicare.
- Hospital staff must complete a 30-item Medicare Secondary Payer questionnaire every time a Medicare patient comes to the hospital, whether for inpatient or outpatient care. The purpose? To make sure the elderly Medicare beneficiary still has no employer-sponsored insurance, or other coverage, that should be the primary payer.
- Because of the complexity and continuous changes in Medicare requirements, medical records must be reviewed for compliance by at least four people, many of whom must be nurses.

- OASIS, the Medicare patient assessment tool used in home health agencies, asks more than 60 questions that the Health Care Financing Administration (HCFA) does not use for calculating payment. Staff must complete the OASIS form on an average of two to three times during every 60-day episode of care.
- OASIS requires 40 minutes of a nurse's time to complete the initial assessment. Additional staff time is required for supervisory review and data entry.
- The Minimum Data Set, the patient assessment tool used in skilled nursing facilities, requires almost 200 questions that are not used in reimbursement.
- Most skilled facilities must hire one full-time employee to coordinate the collection and entry of the required Minimum Data Set.

Specific to long-term care and home care settings and as indicated in Tables 9 and 10, the wages for nurse's aides are believed to be a major determinant of the industry's ability to recruit and retain staff in each respective setting. Failure to address this issue will magnify the health care worker shortage, on both an immediate and long-term basis.

Table 10. Income and Poverty Status of Nurse's Aides (GAO, 2001⁵)

	Nurse's Aides by Setting			Service Workers	All Workers
	Nursing Homes	Home Health	Hospitals		
Family Income (actual)	\$33,982	\$33,653	\$43,832	\$40,712	\$56,020
Poverty status – below poverty	17.8%	18.8%	8.1%	16.1%	10.5%
Health insurance coverage–uninsured	25.2%	32.1%	14.2%	31.2%	16.4%
Receiving food stamps	13.5%	14.8%	5.3%	9.3%	5.5%

Table 11. Wages for Nurse's Aides and Other Occupations, by State, 1999 (GAO, 2001⁵)

State	Nurse's Aide	Factory Worker	Fast Food Cook	Housekeeper
Connecticut	\$11.32	\$12.36	\$7.14	\$8.69
Maine	\$8.01	\$9.43	\$6.78	\$7.61
Massachusetts	\$9.96	\$11.13	\$7.71	\$8.45
New Hampshire	\$9.32	\$10.43	\$7.21	\$7.71
Rhode Island	\$9.51	\$8.78	\$6.84	\$7.42
Vermont	\$8.30	\$10.24	\$7.52	\$7.42
U.S. Average	\$8.59	\$10.67	\$6.54	\$7.46

Health Care Trends

By 2020, the RN workforce is forecast to be roughly the same size as it is today, nearly 20% below the projected RN workforce requirements (Buerhaus, Staiger, & Auerbach, 2000). The shortage will be driven by fundamental, permanent shifts in the labor market that are unlikely to reverse in the next few years.

Some national experts are now concerned that the aging of America and the population growth in many market areas will contribute to an increase in the demand for health care and an increase in inpatient admissions, reversing a 15-year trend. Older, sicker patients will inevitably drive up hospital use in the next five years (Coile, 2001). As cited in the American Hospital Association

⁵ GAO analysis of 1998-2000 current population survey.

News in November 2000, inpatient hospital admissions increased 1.7% (Coile, 2001). This increase in demand is directly opposite to the earlier predictions through 2010. The original projections that included steady decreases of acute care beds through 2010 are now subject to growing skepticism. In addition to the potential increases in demand, technology is flourishing. New pharmaceuticals, diagnostic tests, and therapies are likely to further increase the demand on the workforce.

Multiple strategies will surface for attracting and retaining qualified staff. For example, magnet designation, which was conceived in the early 1980s and has long been believed to demonstrate excellence in nursing, will resurface and be used as a marketing strategy for attracting nursing personnel. It will enhance recruitment and retention and be used as a vehicle to attract and retain qualified nursing staff. Health care organizations will also need to accommodate the aging nursing workforce with greater focus on adapting the environment to make it easier to continue to provide nursing care.

The tight labor market and the aging of the workforce will make human capital all the more scarce and valuable. Organizations will need to focus on retention, even more than on recruitment. Incentive programs will increase and vary across organizations. Unionization efforts will also continue to occur. Ultimately, nurses will send very clear messages to their employers, among them the need to provide more economic opportunities for nurses and to support quality in patient care (Coile, 2001).

The nursing shortage is a national, and international, problem that has been gradually developing over a number of years. The contributing factors to this workforce shortage are complex and far-reaching and include the forces of supply and demand as well as work environment issues. During the 1990s the impact of managed care, including decreased lengths of stay and decreased inpatient admissions, pointed toward a decreased need for nurses, especially in the acute care setting. Hospitals were challenged with declining reimbursement and predictions of hospital closures, or decreased capacity needs. These conditions forced hospitals to make changes. As a result, in Maine today, there are 480 or 11% fewer licensed beds in the state than there were 10 years ago. During the same period, home care and skilled care in long-term care facilities have expanded significantly resulting in fewer job opportunities for nurses, particularly for newer nurses. Enrollment in nursing programs also began to decline, and as a result fewer nurses are graduating from nursing education programs.

Increased utilization of nurses in all sectors of health care has increased the demand. Nurses work in many more areas than at the bedside in hospitals. There are increased opportunities in non-direct-care roles such as case management, utilization review, and quality management. Each of these roles draws nurses away from direct patient care. In addition, the supply of nurses has been affected by a number of factors, including a dramatically changed environment. Sicker patients, technological and pharmaceutical advances, more administrative duties, increased regulatory burden and staffing challenges have markedly increased dissatisfaction among the nursing workforce and resulted in staff turnover.

Working Conditions

In 1994 there was an ample supply of nurses in Maine. Today the vacancy rate for RNs in Maine's hospitals and long-term care facilities is growing, as previously discussed. In addition to lifestyle changes, part of the increasing vacancy rate may be due to changes in working conditions and other career opportunities. Nurses may be electing to leave full-time staff positions and instead work for temporary staffing agencies that pay higher wages, in some cases including benefits, and provides the nurse with greater flexibility. There has been considerable growth in the number of temporary staffing agencies in Maine over the last few years; and currently there are 46 agencies.

A Maine State Nurses Association 2001 survey found that inadequate staffing, heavier work loads, unsafe working environments, use of overtime, and an increase in administrative and other nonpatient activities are some of the major reasons nurses are leaving their profession. Recently, Aiken (2001) reported that 40% of hospital-based nurses in Pennsylvania (13,471 nurses surveyed) were dissatisfied with their present job, 23% were planning to leave their present job in the next year, and 33% of those under age 30 were planning to leave their job in the next year. In relation to staffing, 34% of the nurses reported that there were enough RNs to provide high-quality care, 33% reported that there were enough staff to get the work done, and 43% reported that there were adequate support services. Although 61% said "nurses participate in developing their own schedules" and 57% said "salaries are adequate," only 32% said "nurses have opportunities for advancement."

Maine health care organizations must continually seek new ways to simultaneously meet the needs of patients, workers, and the organization to restore meaning to work and prevent the high levels of dissatisfaction reflected in the data from Pennsylvania nurses. Retaining "working" nurses in Maine is key to our ability to address the current and future nursing shortages. Recruitment efforts have gotten a lot of attention nationally, but unless issues related to the care environment are addressed, nurses will not stay in nursing. Strategies to increase the overall supply of nurses are unlikely to be successful if the health care industry does not make the necessary changes to retain nurses.

Addressing Workplace Issues

Health care organizations have many opportunities to address workplace issues that may contribute to turnover and recruitment problems. For example, Australia universally adopted a range of improvements that resulted in an influx of 2,300 nurses within 6 months (State Government of Victoria, June 2001). These actions included 86 distinct recommendations intended to address the nursing shortage. Over 1,090 Australian nurses returned to nursing through funded refresher reentry courses. Other changes that contributed to the influx of nurses include postgraduate study leave; increases in maternity and paternity leave; scholarships for students; return-to-work programs for injured nurses; and staffing levels that described the number of RNs needed to care for a specific number of patients, with a "flex-up" to increase the number of nurses based on the needs of patients.

In Maine, first and foremost, health care employers must recognize that because the problem the industry faces is so profound, the steps they need to take may be extraordinary. More than

anything else it takes commitment, starting at the top of the organization, to make a difference in the work environment. Opportunities for change will certainly generate healthy discussions within an organization about their appropriateness and affordability. But in spite of the limitations each organization faces, there are steps and actions that can be initiated that will have a beneficial and positive impact in the workplace.

While not minimizing the need to have strong recruitment strategies, organizations should invest a greater amount of their time and resources in retention activities. Whatever ideas are adopted must fit the culture of the organization; legislative dictates to “fix” workplace issues generally fail because they do not take into account the uniqueness of each organization's culture.

The ideas listed in Table 12 are intended to provide a representative list of retention initiatives that have been successful in organizations across the country and have applicability in Maine's health care facilities (COR Health LCC, 2000; Hay Group, 2001).

Table 12. Selected Retention Initiatives

Respect and value nursing	Health care organizations that demonstrate their support for nursing will see the benefits manifested in lower turnover and higher job satisfaction. Putting patients first and addressing nurses’ concerns reinforce the value of nursing.
Invest in nursing leadership	It is often said staff nurses don't leave the organization, but they quit their manager because of dissatisfaction. Stability of nursing leadership is a sign of organizational commitment to RNs. It is evidenced by assuring that nurses are equipped with the requisite soft skills to be effective unit managers and by holding them accountable to leadership standards.
Offer competitive compensation and benefits	Health care organizations may improve the loyalty of their nursing staff and reduce turnover by investing in a wage and benefits program with a broad band of compensation that does not top out after five years. Nursing often does not have the upscale potential of other skilled professions. Good benefits – especially tuition reimbursement, loan forgiveness, health insurance, retirement plans, paid time off, childcare and eldercare benefits – increase retention.
Use adequate and flexible staffing patterns	Flexible scheduling that offers nurses control over the shifts they work and the number of hours they work, coupled with attractive incentives for night, weekend, and holiday coverage, is one of the benefits with a strong impact on retention. Health care organizations are encouraged to create flexible schedules that allow nurses to balance their profession and family, including allowing nurses to be home before and after school to care for young children.
Invite participation in decision making	Nurses respond well to input and participation in decision making that affects nursing practice. Consider introducing shared governance models and unit practice councils to foster nurse participation and buy in.
Offer opportunities for professional development	Initiate opportunities that allow nurses to grow professionally by increasing their competencies and skills through both internal and external leaning experiences. Address specialty-nursing vacancies through internal education programs.
Embrace characteristics of the magnet hospital program	Magnet designation is awarded by the American Nurses Credentialing Center to exemplary hospitals and long-term care facilities whose policies promote and sustain professional nursing practice. Criteria include the status of RNs within the organization, their freedom to intervene in patient care in emergency situations, their collaborative relations with physicians and administrators, and their ratio to patients.

Recommendations

Recognizing the seriousness of the situation (Buerhaus & Staiger, 1999), the Task Force agreed on a number of policy actions that could strengthen the image of nursing and other health careers, support nursing education, and improve the working environment through implementation of best practices. Ongoing collection of reliable data on the health care workforce in Maine is crucial for planning and evaluating the proposed actions. These actions are not prioritized.

Image

- Promote health careers.
- Initiate career advancement.
- Publicly recognize contributions of nursing and other health professions.

Education

- Increase the number of students enrolling in nursing programs.
- Expand nursing program capacity, partly through hiring more full-time faculty and paying competitive salaries.
- Modify nursing curriculum to reflect the changing population demographics.
- Foster increased collaboration between practice and education.
- Foster opportunities for life-long learning for all health care professionals.
- Enhance nurses' leadership knowledge and skills to assure quality health care in the evolving environment.

Best Practices To Improve the Work Environment

- Invest in long-term strategies that support the nursing infrastructure to recruit and retain a qualified nursing workforce.
- Avoid short-term economic incentives and instead focus on providing wage levels and benefits, that are equivalent to those for other technical and professional careers.
- Demonstrate cultural and gender sensitivity in working conditions and policies.
- Restructure and redesign the work environment to accommodate an aging nursing workforce.
- Develop flexible scheduling to retain nurses.
- Create an environment that fosters all levels of nursing staff participation in patient care decision making.
- Advocate for technology that promotes patient safety and enhances the work environment for the nurse.
- Foster a safe and respectful work environment for all health care workers.

Conclusion

Some analysts have proposed that nationally there is not a shortage of nurses, but a shortage of working nurses. In reality, Maine's nurses are more likely to be working in nursing than are nurses nationally. Consequently, targeting nurses who are currently not working in health care is only one piece of the larger puzzle in Maine. It is essential that health care organizations optimize the work environment for all nurses to assure that the bolus of baby boom nurses

remains in the workforce and that younger nurses see nursing as a positive career decision and elect to remain in health care until retirement. It is also essential that nursing education programs be supported to appropriately compensate full-time and part-time faculty and to expand their enrollments to address the growing demand for RNs and to assure an adequate supply of nurses to fill the void created as baby boomers retire. Finally, primary and secondary school children need to once again see a career in health care as desirable.

Maine is experiencing a shortage of nurses and other health care providers. The next few years are critical for building on the work that has already been done. It is essential that we turn this looming crisis around in order to assure quality health care for all Maine citizens. Partnerships that effectively leverage existing and new resources to address the shortage will be key for the future of nursing and health care in Maine.

References

- Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J.A., Busse, R., Clarke, H., Giovannetti, P., Hung, J., Rafferty, A.M., & Shamian, J. (2001). Nurses' reports on hospital care in five countries. *Health Affairs*, 20(3), 43-53.
- American Hospital Association. (2001, May). *Patients or paperwork? The regulatory burden facing America's hospitals*. Retrieved from <http://www.aha.org/ar/advocacy/paperworkreport.asp>.
- American Nurses Association. (2001, February). *Staffing survey*. Washington, D.C.: Author. Retrieved from <http://www.ana.org/surveys>.
- Buerhaus, P.I., & Staiger, D.O. (1999). Trouble in the nurse labor market? Recent trends and future outlook. *Health Affairs*, 18(1), 214-222.
- Buerhaus, P.I., Staiger, D.O., & Auerbach, D.I. (2000). Why are shortages of hospital RNs concentrated in specialty care units? *Nursing Economics*, 18(3), 111-116.
- Coile, R.C. (2001, November). *Nursing 2010 Maine nursing summit*. Presentation given at 2001 Maine Nursing Summit, Augusta, Maine.
- Committee to Address the Health Care Skilled Worker Shortage. (2001, October). *Maine's health care skilled worker shortage: A call to action*. South Portland, ME: Maine Technical College System Center for Career Development.
- COR Health LLC. (2000). *Nurse recruitment and retention strategies*. COR Best Practices Series.
- Evans, D. (2000, July). *Maine employment outlook 1998 to 2008: Industrial and occupational employment projections*. Augusta, ME: State of Maine, Department of Labor, Division of Labor Market Information Services, Economic and Demographic Research Group.
- Fazzi, and Associates. (2001, April). *Private duty staff compensation survey: Home Care Alliance of Maine*. Northhamptom, MA: Author.
- GAO. (2001, March). *GAO Analysis of 1998-2000 current population survey*. Supplements.
- Hay Group. (2001). *The retention dilemma*. Hay Group Working Paper.
- Kirschling, J.M. (2002). *A profile of Maine's nursing education programs*. Portland, ME: University of Southern Maine College of Nursing and Health Professions.
- Kirschling, J.M., Broadway, M., & Vines, S. (2001, December). *Pilot study – Maine's active nursing workforce*. Portland, ME: University of Southern Maine College of Nursing and Health Professions.
- Maine Association of Mental Health Services. (2000, October). *Maine Association of Mental Health Services direct care salary survey*. Augusta, ME: Author.
- Maine Hospital Association. (2000, November). *Maine Hospital Association research on nursing and allied health professional staff shortages*. Augusta, ME: Author.
- Maine Hospital Association. (2001, September). *Maine's health care workforce: Examining the implications of a growing labor shortage on access to hospital care*. Augusta, ME: Author.
- Maine Hospital Association. (2001, October). *Maine's long term care workforce: Examining the implications of a growing labor shortage on access to long term care*. Augusta, ME: Author.
- Maine State Nurses Association. (2001). *MSNA survey*. Augusta, ME: Author.
- State Government of Victoria. (2001, June). *Nurse Recruitment and Retention Committee final report*. Melbourne, Australia: Department of Human Services Nurse Policy Branch. Retrieved from <http://nursing.health.vic.gov.au>.
- U.S. Census Bureau. (2001). *Census 2000 supplementary survey profile for United States*. Retrieved from <http://www.census.gov/c2ss/www/Products/Profiles/2000/Tabular/010/01000US3.htm>. *Census 2000 supplementary survey profile for Maine*. Retrieved from <http://www.census.gov/c2ss/www/Products/Profiles/2000/Tabular/010/01000US3.htm>.
- U.S. Department of Health and Human Services Bureau of Health Professions. (2000, December). *HRSA's state profile for Maine*. Retrieved 10/29/99 http://158.72.83.3/profiles/maine/me_pg2.htm.
- Whitehead, B. (2001). *Survey of allied health professionals*. Augusta, Maine: Author.