

Acknowledgments

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1997 Biennial Survey of Illinois Licensed Practical Nurses

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Executive Summary

This report reflects the fifth biennial survey of Illinois Licensed Practical Nurses since 1989. A total of 25,214 LPNs renewed their licenses in 1997. Of 20,000 LPNs who were sampled, 4,618 returned usable survey instruments, a return rate of 23%. As in previous biennial surveys, data were analyzed and reported in relation to the LPN labor force within the State of Illinois, the practice patterns of LPNs, and their educational preparation in nursing.

Most (86.6%) LPNs in this study both live and work within Illinois. Of those LPNs employed in nursing, about 72% are employed full-time, an increase of about five percent from the 1995 report. There has been a corresponding decrease of about five percent in part-time employment. There continues to be a gradual increase in the proportion of LPNs both working outside nursing and seeking work as an LPN, possibly suggesting a tighter job market for LPNs, as noted in the 1995 report.

About 97% of Illinois LPNs are female. The three leading employers of LPNs continue to be nursing homes or extended care facilities (37.5%), hospitals (21.1%), and doctors' offices (12%). Staff nurse (42.8%) or charge nurse/team leader (18.1%) continue to be the leading principal nursing positions for LPNs in Illinois. Larger hospitals (400+ beds) are more likely than smaller ones to employ LPNs on a full-time basis.

There have been some noticeable shifts in the years of experience as an LPN, suggesting the possibility of sampling error or reporting error. For example, in the last report the median interval for years employed in nursing was eleven to fifteen years; however, in the present survey, it is six to ten years. In this study, both nursing homes and hospitals showed an ability to retain LPNs in their employment. In several employment settings including hospitals, 80% or more of LPNs spend over half their workday in direct patient care activities, the same pattern reported in 1995.

Almost fifty percent of LPNs identify their practice specialty as geriatrics, and about 27% report their specialty as medical nursing. The median hourly salary for full-time LPNs is \$12, unchanged from the 1995 report. The median monthly salary is \$2,000. These employment patterns appear to be little influenced by personal characteristics such as age, gender, or ethnic background.

Consistent with past biennial surveys, community colleges and vocational or technical programs educate close to 90% of practical nurses in Illinois. Regardless of type of practical nursing education, close to two-thirds of LPNs report direct patient care occupying more than 50% of their workday.

There is a continuing trend for LPNs under 45 years of age to report having been educated in community college programs, whereas vocational/technical programs are more likely to represent LPNs over 45 years of age. About 12% of Illinois LPNs report pursuing formal study for an academic degree, a decrease of about two percent from the 1995 study. Again, LPNs in staff nurse positions in larger hospitals are most represented in this group.

Chapter One

Introduction

The 1997 Biennial Survey of Illinois Licensed Practical Nurses is the fifth such study since 1989 and the last of the biennial cycle of these surveys. The 1997 Illinois Nursing Act calls for quadrennial surveys of licensed nursing personnel. As in the past, this survey was initiated in response to a request by the Illinois Department of Professional Regulation and its Committee on Nursing for accurate and timely information on nursing practice and education in the state. The survey was carried out in conjunction with the biennial renewal of registration of practical nurses licensed by the State of Illinois. This report focuses on current labor activity and practice patterns of LPNs licensed in Illinois and characteristics of LPNs holding an Illinois license who are not currently employed as a nurse. The survey, analysis, and report were completed by the Department of Public Health, Mental Health, and Administrative Nursing, at the University of Illinois at Chicago College of Nursing, under a contract issued by the Illinois Department of Professional Regulation.

Method

Similar to the 1995 survey, the present study used a sample survey design. A questionnaire was mailed to each of the first 20,000 LPNs listed as eligible to receive a renewal application for their nursing license. Of the 20,000 survey instruments mailed out, 5,430 were returned, 4,618 of which were usable. Therefore, the overall return rate is 27%, and the usable return rate is 23%. As of August 28, 1997, a total of 26,704 LPNs had active licenses for 1997.

To check for bias in the sample, we looked at the distribution of respondents across residential HSAs for each of the five biennial surveys. As noted in the 1995 report, the data in Table 1.1 suggest that the 1996 distribution conforms to that of previous surveys with the exception of 1988, where it appears HSA 7 was undersampled and HSA 6 oversampled. In addition to that possible sampling anomaly, it appears that across the remaining four surveys the representation of LPNs from Chicago (HSA 6) has decreased by about one percent per year. There is a similar decline in the percent of LPNs representing east central Illinois (HSA 4). These changes could be due to sampling error or to response bias.

Although the basic questions were retained from the 1995 survey, several changes were made to eliminate inappropriate respondents (e.g., LPNs who also have a RN license and are employed as a RN), to improve logical ordering of items, and to simplify the marking of responses. The survey instruments were printed by Scantron, Inc., and shipped to the Illinois Department of Professional Regulation (IDPR) in October, 1996. For those LPNs selected for the study, IDPR inserted the survey

instrument into the biennial LPN license renewal materials mailed to LPNs. Those nurses were asked to complete and send the questionnaire, in an enclosed, postage-paid envelope, directly to the researchers at the University of Illinois at Chicago College of Nursing (UIC). This return procedure assured that respondents could not be identified and would remain anonymous throughout the data collection and analysis process.

Table 1.1

Percent of LPNs by Residential HSA across Five Biennial Surveys

<u>Residential HSA</u>	<u>Year of Data</u>				
	<u>1988</u> (N=9,420)	<u>1990</u> (N=7,053)	<u>1992</u> (N=7,295)	<u>1994</u> (N=5,771)	<u>1996</u> (N=3,847)
HSA 1	8.9	8.2	7.7	7.6	8.5
HSA 2	9.2	9.6	9.6	9.5	9.9
HSA 3	12.4	13.0	11.8	12.0	12.7
HSA 4	13.4	12.0	12.1	11.1	10.3
HSA 5	8.1	11.3	10.6	11.8	12.9
HSA 6	16.4	14.3	13.9	12.8	11.1
HSA 7	3.6	9.2	11.6	11.2	10.8
HSA 8	4.4	2.5	3.6	3.6	3.1
HSA 9	5.2	4.0	4.8	4.6	5.1
HSA 10	1.9	1.7	2.1	2.1	2.1
HSA 11	6.2	5.3	4.7	5.1	5.9
Other USA	10.3	8.8	7.4	8.5	8.4

The UIC research team received most of the returned questionnaires in January and February of 1997; questionnaires received after June, 1997, were not scanned. Prior to scanning by the electronic optical mark reader, the instruments were checked for scannability and other errors. Although electronic scanning reduces both the time required for data entry and keystroke errors associated with manual data entry, other sources of error include ink instead of pencil responses and ambiguous pencil or pen markings. About 800 questionnaires were not usable because they were (1) marked with an unreadable ink; (2) blank or incomplete; (3) rejected by the scanner due to wrinkles or tears; (4) returned by nurses working in RN positions; or (5) marked as retired or inactive. In addition, another 60 envelopes contained a license renewal form instead of a survey questionnaire. Although the renewal forms were returned to the Springfield office of IDPR, any misaddressed survey instruments were not retrievable and therefore not included in the final data set.

Via the electronic scanning process, data were read into the hard drive of a microcomputer, with back-up copies stored on floppy microdiskettes. All data analysis was performed on the desktop computer using the Statistical Package for the Social Sciences (SPSS for Windows, version 6.1) software. An SPSS system file was constructed from the raw data and data definition statements. Frequencies for each variable were examined, and appropriate ranges for these variables were defined. The major task of data reduction was to aggregate respondents by Health Service Area (HSA).¹ Illinois counties in each HSA are shown on the map in Figure 1.1.

The final report was completed by the researchers, printed by the UIC Printing Service, and delivered to IDPR in April, 1998, along with a copy of the data set and SPSS code book on floppy diskettes.

A few changes have been made to the order in which information is presented in Chapter Two. There are now two main sections, the first describing LPNs who were currently employed at the time of the survey, followed by a section showing characteristics of LPNs who were not employed in nursing at the time of the survey. Table 1.3 shows corresponding table numbers in this report and the 1995 (and prior) report(s).

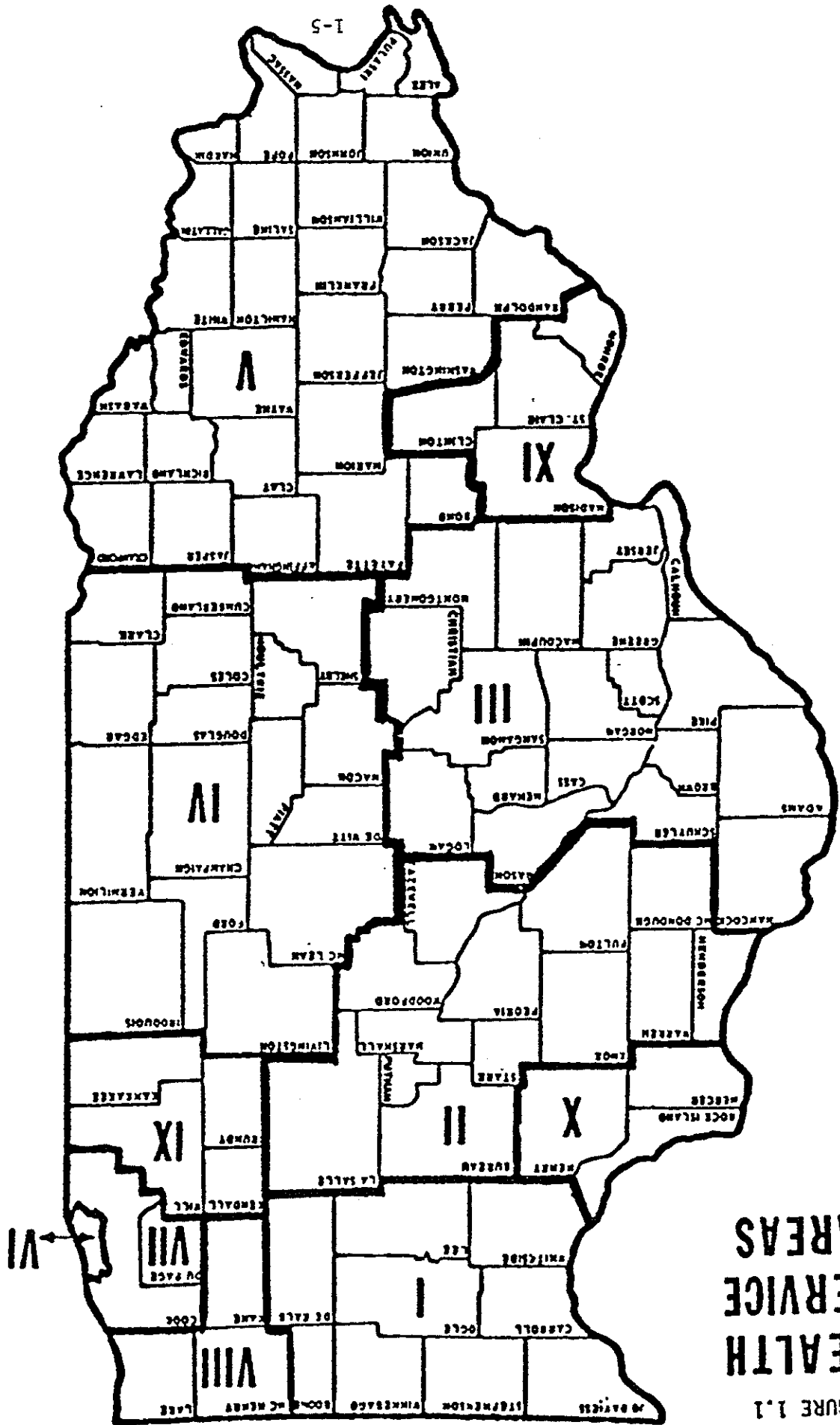
¹

Health Service Areas were originally federal geographic designations under the now defunct National Health Planning and Development Act of the mid-1970s, and continue to be used in Illinois for documenting certificates of need and reporting vital statistics. (Source: Laura Landrum, Deputy Director, Office of Epidemiology and Health Systems Development, Illinois Department of Public Health)

Table 1.2

Counties in Illinois Health Service Areas (HSA)

HSA 1	HSA 3	HSA 5	HSA 6
Boone	Adams	Alexander	Chicago
Carroll	Brown	Bond	
DeKalb	Calhoun	Clay	HSA 7
Jo Daviess	Cass	Crawford	
Lee	Christian	Edwards	Cook -
Ogle	Greene	Effingham	(Outside
Stephenson	Hancock	Fayette	Chicago)
Whiteside	Jersey	Franklin	DuPage
Winnebago	Logan	Gallatin	
	Macoupin	Hamilton	HSA 8
	Mason	Hardin	
	Menard	Jackson	Kane
HSA 2	Montgomery	Jasper	Lake
	Morgan	Johnson	McHenry
Bureau	Pike	Lawrence	
Fulton	Sangamon	Marion	HSA 9
Henderson	Schuyler	Massac	
Knox	Scott	Perry	Grundy
LaSalle		Pope	Kankakee
Marshall	HSA 4	Pulaski	Kendall
McDonough		Randolph	Will
Peoria	Champaign	Richland	
Putnam	Clark	Saline	HSA 10
Stark	Coles	Union	
Tazewell	Cumberland	Wabash	Henry
Warren	De Witt	Washington	Mercer
Woodford	Douglass	Wayne	Rock
	Edgar	White	Island
	Ford	Williamson	
	Iroquois		HSA 11
	Livingston		
	Macon		Clinton
	McLean		Madison
	Moultrie		Monroe
	Piatt		St. Clair
	Shelby		
	Vermilion		



HEALTH SERVICE AREAS

FIGURE 1.1

Table 1.3

Table Numbering Changes in Chapter Two from 1995 to 1997

<u>1995 Table Number</u>	<u>1997 Table Number</u>
2.1	omitted
2.2	2.1
2.3	2.2
2.4	2.7
2.5	2.3
2.6	2.4
2.7	2.5
2.8	2.8
2.9	2.6
2.10	2.9

Chapter Two

Labor Participation of Licensed Practical Nurses in Illinois

This chapter describes the distribution of LPNs across the state, those employed within and outside nursing, and those seeking employment as a LPN. A more detailed description of the 1996 LPN labor force in Illinois is provided in terms of full- and part-time employment, work setting, job title, educational preparation, and personal characteristics. Less detailed information is provided for LPNs living or working in states other than Illinois (10.2% and 10.3%, respectively). Excluded from these analyses are LPNs residing or working outside the United States (0.1% or less) and LPNs whose residence or employment location is missing (6.8% and 5.3%, respectively) due to nonresponse or ambiguous markings.

Of practical nurses renewing their Illinois licenses in 1997, only a small percentage reported either never having worked as a nurse (0.2%) or never having worked as a LPN in Illinois (1.9%). Of all LPNs employed in a nursing position in 1996, most (86.6%) both lived and worked within the state. A few lived within Illinois and were employed in neighboring states (3.5%) or lived in surrounding states but worked within Illinois (3.4%).

Employment as an LPN

The number of LPNs reporting employment within Illinois increased from 1995 to 1996 by 5.8% (Table 2.1). This increase in employment within Illinois was true across all Illinois HSAs, ranging from 3.0% (HSA 9) to 8.7% (HSA 1). Of LPNs employed outside Illinois in 1996, an even larger proportion (14.1%) reported being employed in 1996 compared with 1995.

Table 2.2 shows the level of employment activity for LPNs reporting employment in 1996. For the state as a whole, almost three-fourths (72.1%) of LPNs reported being employed full-time in nursing. Across HSAs this level of employment activity ranged from 60.3% (HSA 9) to almost 79% (HSAs 5 and 10). Part-time employment was reported by 23.1% of LPNs across the state, with a range of 14.0% (HSA 10) to 35.1% (HSA 9). Employment on a partial-year basis, either full- or part-time, ranged from a low of 3.4 or 3.5% (HSAs 11 and 3) to a high of 8.0% (HSA 6). The pattern of full-time work has approximated 70% across the five biennial surveys (Table 2.2a). Part-time employment has been close to 23- or 24%. As noted in the last report, partial-year employment continues to show a gradual decline, from 6.1% in 1989 to 4.7% in 1997.

Table 2.2a

Percent of Full- and Part-time Employed LPNs in Illinois in Five Biennial Surveys

<u>Level of employment</u>	<u>Year of Survey Report</u>				
	<u>1989</u>	<u>1991</u>	<u>1993*</u>	<u>1995</u>	<u>1997</u>
Full-time	68.4	70.0	70.0	66.5	72.1
Part-time	25.5	24.4	25.0	28.6	23.1
Partial-year	6.1	5.5	5.0	4.9	4.7

* Median values.

As seen in Table 2.3, larger proportions of LPNs continue to report being employed in nursing home/extended care facilities (37.5%), hospitals (including psychiatric; 21.1%), and physicians' or dentists' offices (12.0%). In addition proportionately more LPNs are employed in private (both for- and not-for-profit) institutions (79.2%). In most of these settings about two-thirds of the LPNs describe their position as full-time; about three-fourths of LPNs in nursing homes and almost all (96.8%) LPNs in psychiatric hospitals report full-time employment (Table 2.3). Between 80- and 85% of LPNs in HMOs, public or community health agencies, substance abuse facilities, and state government facilities report full-time employment. LPNs in nursing or health associations are more prominent in full-time (45.5%) and partial year (36.4%) arrangements.

The percent of LPNs in various nursing positions is shown in Table 2.4. Similar to the 1995 survey, staff nurse is the most frequently identified principal nursing position (42.8%) followed by charge nurse/team leader (18.1%) and office nurse (11.2%). Proportionately more charge nurse/team leaders (80.0%) and utilization review nurses (100%) report full-time employment. LPNs in technician positions, home care, and private duty are least likely to report full-time employment (59.4%, 54.3%, and 40.0%, respectively). The positive relationship between hospital bed capacity and full-time employment, noted in 1995, is evident in these data as well. Larger hospitals are more likely to employ LPNs on a full-time basis (e.g., 500+ beds, 80.9%) with smaller hospitals being less likely to employ full-time LPNs (e.g., 1-99 beds, 71.3%).

In 1996 the relationship between educational preparation in nursing and LPNs' level of labor activity is similar to that in 1994 (Table 2.5). A higher proportion (about 72- to 74% in 1996 compared with about two-thirds in 1994) of graduates of high school, community college, and vocational/technical programs report employment on a full-time basis. Very similar to 1994, about three-fourths of LPNs identifying their practical nursing education as "no formal program" (75.8%) or "other" (72.8%) report

full-time employment. Graduates of hospital programs are most likely to be employed on a part-time basis (29.2%) when compared with other programs. As previously noted, these patterns have varied across the biennial surveys since 1989, suggesting no predictable trend in the influence of education on level of labor activity.

The personal characteristics of LPNs by their level of employment in 1996 is shown in Table 2.6. Similar to the 1995 report, males are more likely than females to be employed on a full-time basis (85.1% and 71.5%, respectively). About 73% of LPNs below retirement age report working on a full-time basis compared with LPNs 65 years of age or older (49.7%). In terms of race, Asian/Pacific Islander and Hispanic LPNs are most likely (86.5% and 84.5%, respectively), and whites are least likely (69.7%), to be employed full-time, patterns similar to those reported in 1995. Again similar to 1995, LPNs describing themselves as divorced and separated are more likely to be employed full-time (83.7% and 86.4%, respectively) compared with widowed nurses (66.7%). Number of children does not show a clear relationship to level of employment. Finally, 65% or more of LPNs whose gross household income is \$9,000 or more hold full-time positions.

Lack of Employment as a LPN

Table 2.7 shows that from 8.8% (HSA 1) to 12.4% (HSA 2) of LPNs reported not working as a LPN in 1996, 10.9% for the state as a whole. Those reporting working in health care, but not as an LPN, ranged from 2.6% (HSA 9) to 10.9% (HSA 8) (Total Illinois = 6.4%); and those reporting working in positions not in health care ranged from 4.3% (HSA 6) to 9.6% (HSA 4) (Total Illinois = 8.2%). Almost 12% of all LPNs were seeking work as a LPN.

Compared to previous years (Table 2.7a), proportionately fewer (10.9%) LPNs in 1996 were not working as a practical nurse, the lowest proportion since 1989. However, continuing two trends noted in the last report, proportionately more LPNs are seeking work as a LPN (11.7% in 1996 compared with 7.2% in 1989) and are employed outside nursing (14.6% in 1996 compared with 8.6% in 1989). Thus, even though a greater proportion of LPNs report being employed in nursing in 1996 and employed on a full-time basis (see Table 2.3a), it appears that the proportion of LPNs either seeking nursing work or working outside nursing is also increasing. One possible conclusion is that increasing economic needs are driving fully employed LPNs to obtain additional income either as a LPN or in work outside nursing.

Table 2.7a

Percent of LPNs Not Working as a LPN, Seeking Work as a LPN, and Employed outside Nursing in Five Biennial Surveys

<u>Employment</u>	<u>Year of Survey Report</u>				
	<u>1989</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>
Not working as LPN	17.7	12.5	12.0	14.5	10.9
Seeking work as LPN	7.2	5.9	8.6	11.1	11.7
Employed outside nursing	8.6	9.8	10.4	12.6	14.6

Table 2.8 shows the proportion of LPNs not working in nursing by educational preparation in nursing. The range of those not working as an LPN is from a low of 9.1% of LPNs reporting "no formal program" to a high of 20.0% of those reporting having graduated from a hospital program. Six and three-tenths percent of LPNs reporting "other" preparation as an LPN reported they were seeking work as an LPN compared with 13.6% of LPNs whose education was in a vocational or technical school. Similar to the 1995 report, the highest proportion of LPNs reporting working outside nursing are those with no formal preparation in nursing (25.6%).

Table 2.8a shows that the proportion of graduates of high school and hospital programs not working as a LPN (18.0% and 20.0%, respectively) is almost twice that of graduates of the four other program categories (9.1% to 11.8%). Again, there is a gradual but consistently increasing trend for graduates of hospital, community college, and vocational/technical programs to be seeking work as a LPN. Thus, it appears that although LPNs educated in community college and vocational/technical programs are consistently more likely to be employed as LPNs across these three surveys, most LPNs are increasingly seeking work as a LPN.

Table 2.9 describes those LPNs not employed in nursing by their personal characteristics. Although more likely to be employed full-time compared with females, male LPNs are also more likely to be seeking work as an LPN (17.9% and 11.3%, respectively) and to be employed outside nursing (20.7% and 12.6%, respectively). Older nurses (65 years and older) are more likely to not be employed as an LPN (44.0% compared with 16.3% or less) and younger nurses (under 30 years) are more likely than older nurses to be seeking work as an LPN (19.5% compared with 11.8% or less). Other groups most likely to not be working as an LPN and seeking employment in nursing are American Indians (25.8% and 27.6%, respectively) and those LPNs whose household income is under \$9,000 (41.7% and 32.4%, respectively). LPNs with

no children are more likely than nurses with children to not be employed as an LPN (17.4% compared with 13.6% or less), and LPNs with more than four children are more likely than those with fewer or no children to be employed outside nursing (18.3% compared with 13.3% or less).

Table 2.8a

Percent of LPNs Reporting Not Working and Seeking Work as an LPN by Nursing Education Across Three Biennial Surveys

<u>Education</u>	<u>Not Working as LPN</u>				<u>Seeking Work as LPN</u>			
	<u>1989</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>	<u>1989</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>
High School	22.2	13.0	18.4	18.0	8.2	9.3	13.4	9.8
Hospital	25.0	21.0	27.2	20.0	7.5	9.9	10.1	10.9
Community Col.	17.6	11.8	14.3	10.3	7.1	8.2	11.4	11.5
Vocational/Tech.	17.5	10.9	15.9	11.8	7.8	8.5	12.1	13.6
No Formal Prog.*	29.2	14.0	34.8	9.1	9.3	6.5	11.6	10.3
Other	24.8	9.2	13.9	9.8	10.1	9.5	10.2	6.3

* In 1989 and 1991 this category was referred to as "waiver."

Table 2.1

1995-96 Employment Distribution of LPNs Licensed in Illinois and Currently Working In Nursing

Employment Location	N (1996)	N (1995)	% Change
Illinois HSA 1	287	264	8.7
Illinois HSA 2	309	285	8.4
Illinois HSA 3	413	391	5.6
Illinois HSA 4	342	329	4.0
Illinois HSA 5	396	374	5.9
Illinois HSA 6	369	351	5.1
Illinois HSA 7	382	358	6.7
Illinois HSA 8	96	91	5.5
Illinois HSA 9	139	135	3.0
Illinois HSA 10	60	57	5.3
Illinois HSA 11	187	181	3.3
Total, Illinois	2980	2816	5.8
Other, USA	348	305	14.1

Note: N=Number of LPNs reporting working within this geographic location. HSA=Health Service Area.

% Change = $(N(1996)-N(1995))/N(1995)$; e.g., 8.7% more currently working LPNs reported working in Illinois HSA 1 in 1996 than in 1995.

Table 2.2

1996 LPN Labor Activity by Employment Location

Employment Location	N	1996 Labor Activity		
		Full-Time	Part-Time	Partial Year
Illinois HSA 1	287	68.2	26.1	5.7
Illinois HSA 2	309	70.3	24.8	4.9
Illinois HSA 3	413	74.1	22.4	3.5
Illinois HSA 4	342	70.7	25.7	3.6
Illinois HSA 5	396	78.6	17.7	3.7
Illinois HSA 6	369	77.1	14.9	8.0
Illinois HSA 7	382	69.3	26.4	4.3
Illinois HSA 8	96	65.6	29.0	5.4
Illinois HSA 9	139	60.3	35.1	4.6
Illinois HSA 10	60	78.9	14.0	7.0
Illinois HSA 11	187	71.9	24.7	3.4
Total Illinois	2980	72.1	23.1	4.7
Other, USA	348	73.6	20.3	6.1

Note: N=Number of LPNs reporting nursing employment with the HSA, e.g., 68.2% of 287 LPNs working in Illinois HSA 1 in 1996 reported holding a full-time LPN position. Percentages may not sum to 100% for full-time, part-time, and partial year due to rounding.

Table 2.3

LPN Labor Activity by Principal Work Setting and Agency Type

Principal Work Setting	N	Labor Activity as LPN in 1996		
		Full Time	Part Time	Partial Year
Hospital	751	69.1	28.0	3.0
Hospital Clinic	96	73.9	22.8	3.3
Clinic	157	73.2	19.6	7.2
HMO	72	80.9	16.2	2.9
Emergicenter	28	70.4	25.9	3.7
Physician/Dentists' Ofc.	445	67.0	29.2	3.8
Nsg Home/Extended Care	1391	76.3	19.5	4.2
Home Care Agency	270	53.8	34.4	11.8
Public/Community Health	52	80.8	15.4	3.8
Occupational Health	38	73.7	18.4	7.9
Student Health Service	48	61.7	29.8	8.5
Self-employed	38	62.2	21.6	16.2
Nursing or Health Assoc.	11	45.5	18.2	36.4
Psychiatric Hospital	33	96.8	0.0	3.2
Substance Abuse Fac.	43	82.9	9.8	7.3
Other	234	76.0	19.1	4.9
Type of Agency				
Federal Gov't	148	92.2	6.4	1.4
State Gov't	296	84.5	12.3	3.2
County/City Gov't	320	77.6	18.2	4.2
Private Not-For-Profit	1239	68.4	26.9	4.7
Private For-Profit	1675	69.1	24.8	6.1

Note: N=Number of LPNs reporting this setting for principal nursing employment, e.g., 69.1% of 751 LPNs working in hospitals reported having a full-time LPN position. Percentages for full-time, part-time, and partial year may not sum to 100% due to rounding.

Table 2.4

1996 LPN Labor Activity by Principal Nursing Position and Hospital Bed Capacity

Principal Position	N	1996 LPN Labor Activity		
		Full Time	Part Time	Partial Year
Staff Nurse	1581	71.0	25.2	3.8
Assistant to Physician Technician	147	73.6	20.1	6.3
Charge Nurse/Team Ldr	35	59.4	28.1	12.5
Inservice Education	667	80.0	15.6	4.5
Home Care Nurse	14	78.6	21.4	0.0
Utilization Review Nurse	240	54.3	34.1	11.6
Consultant	27	100.0	0.0	0.0
Private Duty Nurse	13	76.9	23.1	0.0
Office Nurse	71	40.0	42.9	17.1
School Nurse	515	69.0	27.6	3.3
Other	43	61.9	31.0	7.1
Other	340	81.0	12.9	6.1
Hospital Bed Capacity				
1 - 99	555	71.3	24.9	3.9
100 - 199	618	75.1	21.5	3.5
200 - 299	387	76.8	19.3	4.0
300 - 399	187	71.2	22.3	6.5
400 - 499	91	80.7	17.0	2.3
>500	143	80.9	17.0	2.1

Note: N=Number of LPNs reporting employment in this position or hospital bed size; e.g., 71.0% of 1,581 LPNs working as a staff nurse reported working full-time as an LPN in 1996. Percentages may not sum to 100% due to rounding.

Table 2.5

LPN Labor Activity by Practical Nursing Education

	N	1996 Nursing Labor Activity		
		Full Time	Part Time	Partial Year
Practical Nursing Education				
High School	227	73.8	20.9	5.2
Hospital	229	63.4	29.2	7.5
Community College	1846	72.5	22.7	4.9
Vocational/Technical	1956	72.1	23.4	4.5
No Formal Program	40	75.8	21.2	3.0
Other	96	72.8	21.0	6.2

Note: N=Number of LPNs reporting this practical nursing program; e.g., 73.8% of 227 LPNs whose practical nursing education was through a high school program reported working full-time as an LPN in 1996. Percentages may not sum to 100% due to rounding.

Table 2.6

1996 LPN Labor Activity by Personal Characteristics

Personal Characteristic	N	Full Time	Part Time	Partial Year
Sex				
Female	4392	71.5	23.5	5.0
Male	114	85.1	8.5	6.4
Age				
18 - 30 Years	338	72.3	21.6	6.2
31 - 45 Years	1838	73.6	21.9	4.5
46 - 65 Years	1925	72.7	23.1	4.3
> 65 Years	292	49.7	40.0	10.3
Race				
Hispanic	83	84.5	7.0	8.5
Native American	23	77.8	22.2	0.0
Asian/Pacific Islander	55	86.5	9.6	3.8
African-American	676	79.7	12.4	7.9
White, not Hispanic	3676	69.7	26.0	4.4
Marital Status				
Married	3065	67.3	27.9	4.8
Separated	108	86.4	5.7	8.0
Widowed	229	66.7	24.7	8.6
Divorced	747	83.7	11.7	4.6
Never Married	366	81.4	14.9	3.7
Number of Children				
None	1009	71.0	22.3	6.6
1	928	74.0	21.8	4.2
2 - 4	1669	71.0	25.0	4.0
> 4	63	74.0	24.0	2.0
Gross Household Income				
Less than \$9,000	406	31.3	53.3	15.4
\$ 9,000 - \$14,999	1028	78.5	16.2	5.4
\$15,000 - \$29,999	1853	78.5	17.7	3.8
\$30,000 - \$49,999	474	66.2	30.2	3.6
\$50,000 and over	537	65.5	31.1	3.4

Note: N=Number of LPNs reporting this personal characteristic, e.g., 71.5% of 4,392 female LPNs reported holding a full-time LPN position. Full-time, part-time, and partial year percentages may not sum to 100% due to rounding.

Table 2.7

Lack of LPN Labor Activity by Residence Location

Residence Location	N	Not Working as LPN (a)	Seeking Work as LPN (b)	Working Outside Nursing	
				In Health Care (c)	Not In Health Care (d)
Illinois HSA 1	328	8.8	7.9	5.3	9.0
Illinois HSA 2	379	12.4	9.7	5.9	9.4
Illinois HSA 3	490	11.3	9.6	5.4	9.1
Illinois HSA 4	397	11.8	8.7	6.6	9.6
Illinois HSA 5	495	11.9	12.6	6.1	8.9
Illinois HSA 6	427	10.0	21.7	7.6	4.3
Illinois HSA 7	417	10.8	12.3	7.5	8.9
Illinois HSA 8	121	11.8	8.4	10.9	8.4
Illinois HSA 9	196	9.4	14.0	2.6	7.2
Illinois HSA 10	81	9.3	3.7	7.4	8.6
Illinois HSA 11	187	10.5	11.8	8.6	5.4
Total Illinois	3518	10.9	11.7	6.4	8.2
Other, USA	325	0.0	15.1	5.1	4.1

Note: Results are expressed as percentages, i.e., 8.8% of 328 LPNs who reside in HSA 1 reported not working as an LPN in 1996.

- a Not Working as LPN= % LPNs reporting not working as an LPN during 1996.
- b Seeking Work as LPN= % LPNs reporting not employed as an LPN in 1996 and actively seeking employment as an LPN.
- c Working Outside Nursing: In Health Care= % of LPNs reporting employment within health care but not in nursing.
- d Working Outside Nursing: Not In Health Care=% of LPNs reporting employment outside health care.

Table 2.8

Lack of LPN Labor Activity in 1996 by Practical Nursing Education

	N	Not Working as LPN (a)	Seeking Work as LPN (b)	Working Outside Nursing	
				In Health Care (c)	Not In Health Care (d)
Practical Nursing Education					
High School	227	18.0	9.8	9.3	7.6
Hospital	229	20.0	10.9	9.3	12.9
Community College	1846	10.3	11.5	6.2	8.8
Vocational/Technical	1956	11.8	13.6	5.7	7.0
No Formal Program	40	9.1	10.3	7.7	17.9
Other	96	9.8	6.3	6.4	10.6

Note: N=Number of LPNs reporting this practical nursing program; e.g., 18.0% of 227 LPNs whose practical nursing education was through a high school program reported not working as an LPN in 1996. Percentages may not sum to 100% due to rounding.

- a Not Working as LPN= % LPNs reporting not working as an LPN during 1996.
- b Seeking Work as LPN= % LPNs reporting not employed as an LPN in 1996 and actively seeking employment as an LPN.
- c Working Outside Nursing: In Health Care= % of LPNs reporting employment within health care but not in nursing.
- d Working Outside Nursing: Not In Health Care=% of LPNs reporting employment outside health care.

Table 2.9

Lack of LPN Labor Activity by Personal Characteristics

Personal Characteristic	N	Not Working as LPN (a)	Seeking Work as LPN (b)	Working Outside Nursing	
				In Health Care (c)	Not In Health Care (d)
Sex					
Female	4392	12.0	12.0	6.3	8.1
Male	114	9.8	18.4	9.8	13.4
Age					
18 - 30 Years	338	8.5	20.2	5.4	6.5
31 - 45 Years	1838	8.5	13.2	6.4	9.3
46 - 65 Years	1925	12.8	9.6	6.8	7.7
> 65 Years	292	32.0	10.0	4.3	5.4
Race					
Hispanic	83	11.3	22.0	3.6	10.8
Native American	23	25.0	22.7	4.3	8.7
Asian/Pacific Islander	55	0.0	14.5	5.5	9.1
African-American	676	13.2	22.3	8.1	4.5
White, not Hispanic	3676	11.8	9.9	6.1	8.8
Marital Status					
Married	3065	11.7	10.0	5.7	7.9
Separated	108	12.5	23.8	8.7	7.7
Widowed	229	26.6	15.2	5.4	7.2
Divorced	747	10.7	14.1	7.4	9.2
Never Married	366	8.1	19.9	9.5	9.5
Number of Children					
0	1009	14.8	12.5	7.3	8.8
1	928	10.2	11.8	6.7	10.3
2 - 4	1669	9.8	12.5	5.8	7.8
> 4	63	7.3	16.4	9.7	14.5
Gross Household Income					
Less than \$9,000	406	31.9	21.9	8.8	13.3
\$ 9,000 - \$14,999	1028	7.9	14.8	5.4	6.4
\$15,000 - \$29,999	1853	9.6	11.1	6.2	7.8
\$30,000 - \$49,999	474	7.8	6.8	6.0	8.3
\$50,000 and over	537	12.1	8.3	9.0	8.3

Note: N=Number of LPNs reporting this personal characteristic, e.g., 12.3% of 39,483 female LPNs reported not working as an LPN in 1996. Percentages may not sum to 100% due to rounding.

- a Not Working as LPN= % LPNs reporting not working as an LPN during 1996.
 b Seeking Work as LPN= % LPNs reporting not employed as an LPN in 1996 and actively seeking employment as an LPN.
 c Working Outside of Nursing: In Health Care= % of LPNs reporting employment within health care but in an occupation other than nursing.
 d Working Outside Nursing: Not In Health Care=% of LPNs reporting employment outside health care.

Chapter Three

Practice Patterns of Licensed Practical Nurses in Illinois

This chapter describes the variety of principal nursing positions occupied by LPNs. Several dimensions of LPNs' nursing practice are highlighted including years of employment as a LPN, years in a given work setting, practice specialty, involvement in selected nursing activities, income from nursing employment, and personal characteristics.

Tables 3.1 and 3.2 show the total length of experience as a LPN and years of practice within Illinois. For most HSAs the largest proportion of nurses report having been employed as a LPN for one to five years. In Chicago and Cook County (HSAs 6 and 7) the proportion of nurses in this category is less than 25%; in central Illinois (HSAs 3 and 4) the proportion is 20- to 25%; and down-state, (HSAs 5 and 11) close to one-third of LPNs report one to five years experience in nursing. In terms of years employed in Illinois as a LPN (Table 3.2) the distribution shows a little more variation across HSAs.

Table 3.1a

Percent of LPNs Reporting Years Employed as a LPN across Five Biennial Surveys (Total Illinois Employment HSAs)

Year of Data	Years Employed					
	<u>1-5</u>	<u>6-10</u>	<u>11-15</u>	<u>16-20</u>	<u>21-35</u>	<u>> 35</u>
1988	22.6	28.8	19.5	15.1	8.7	0.3
1990	22.0	30.2	20.7	15.9	10.7	0.4
1992	27.1	20.2	15.6	13.5	11.4	NA*
1994	14.9	23.9	27.7	18.5	13.6	1.3
1996	24.1	21.9	13.5	16.8	22.1	1.5

* NA=not available.

Tables 3.1a and 3.2a show similar patterns of shift in the distribution of reported years of employment as a LPN. Across the five biennial surveys, about 23-24% of Illinois LPNs have 1-5 years of experience. In 1992 LPNs had about 4% more than the "usual," and in 1994 they had about 10% less than the usual. The unusual percentage for 1994 is most likely due to underrepresentation of this group of LPNs in our sample for that year, or erroneous reporting by that year's respondents. The higher percentage

in 1992 may be due to an increased number of new graduates in 1990-91, or some other factor that our data cannot identify.

In general, about 22% of Illinois LPNs have 6-10 years of experience and this has decreased since 1988 from closer to 30%. In general, the state has about 14% of its LPNs with 11-15 years of experience, and this has decreased since 1988 from closer to 20%. The unusually high 28% rate in 1994 may be due to a disproportionately high response rate from this group of LPNs, or erroneous reporting by that year's respondents.

The overall pattern is an increasing amount of experience among the Illinois LPN population. The unusually high 23% of LPNs with over 20 years of experience reported in 1996, however, bears watching for consistency across future surveys.

Table 3.2a

Percent of LPNs Reporting Years Employed in Illinois as a LPN
Across Five Biennial Surveys (Total Illinois Employment HSAs)

Year of Data	Years Employed					
	<u>1-5</u>	<u>6-10</u>	<u>11-15</u>	<u>16-20</u>	<u>21-35</u>	<u>> 35</u>
1988	28.3	29.7	19.6	14.2	7.9	NA*
1990	25.4	29.6	20.4	14.2	9.9	NA*
1992	28.8	24.6	18.5	15.6	11.9	0.5
1994	16.6	25.3	28.4	17.4	11.1	1.1
1996	28.3	23.3	12.1	15.0	20.2	1.1

* NA=not available.

Nursing homes and extended care facilities (37.3%), hospitals (20.3%), and doctors' offices (13.3%) continue to be the most commonly reported settings of employment (Table 3.3). Similar to the 1995 survey, nursing homes employ the largest proportion of LPNs except in Chicago, where the hospital is the most common employer. Also consistent with prior surveys, private agencies are more commonly reported as employers than are public facilities.

The distribution of LPNs across principal nursing positions is essentially unchanged from prior years (Table 3.4), with staff nurse (43.2%), charge nurse (17.3%), and office nurse (15.3%) being the top three positions for Illinois as a whole. As in previous surveys, in-service education (0.4%), utilization review (0.8%), and consultation (0.3%) are the least common nursing positions.

Table 3.5 shows across employment settings the mean number of years with a current employer and in one's current position within categories of years of experience as a LPN. Although these measures together create a complex matrix, they permit some inference making about job stability or retention of LPNs in various clinical settings. LPNs working in hospitals, doctors' offices, and nursing homes show a clear pattern of retention (mean number of years with employer) across categories of years of experience in nursing. In other words, the mean number of years with the employer gradually increases with the number of years in practice. This pattern is strongest in hospitals where LPNs with one-to-five years of experience have 4.2 mean years with their employer, and nurses with over 20 years of experience have an average of 20.4 years with their employer. In contrast, LPNs working in home health settings do not show a pattern indicating they are being retained in these settings (range: 3.1 to 8.3 mean years).

Table 3.6 shows that more than seventy-five percent of LPNs employed in hospitals (87.3%), hospital clinics (82.8%), emergenciers (89.3%), and home health agencies (79.2%) spend more than half their time in direct patient care. A much more modest proportion of LPNs in nursing home/extended care settings (12.5%) and nursing or health associations (18.2%) spend more than half their work time in staff supervision. Table 3.7 shows that a similar proportion of LPNs in in-service education (16.7%) and charge nurse (15.6%) positions spend 50% or more of their time in staff supervision. The patterns in these two tables are comparable to prior years.

Table 3.8 provides a breakdown of nursing practice specialty by HSA. Similar to previous surveys proportionately more LPNs (49.7% for Illinois as a whole) identify geriatrics as their nursing specialty. Medical (26.9%) and surgical (15.2%) nursing are the next two most commonly identified specialties.

Overall, the median hourly salary is unchanged from 1995 (\$12 and \$12.05, respectively), and the median monthly salary is increased (\$2,000 and \$1,813.67, respectively; Table 3.9). One exception to this trend is school nurses who report a lower mean hourly salary (\$10.96 compared with \$12.71 in 1995) and a lower average monthly salary (\$1,230 compared with \$1,719.91 in 1995). The highest mean hourly wages are reported by LPNs working as consultants (\$18) and utilization review nurses (\$15.41). The lowest hourly wages are reported by school nurses (\$10.96), assistant to physicians (\$11.35), and inservice education nurses (\$11.67). Average monthly salaries range from \$1,230 (school nurse) to \$2,468 (utilization review nurse).

Similar to the 1995 survey, the data in Table 3.10 suggest that, as a general pattern, a LPN's choice of employment setting is little affected by the personal characteristics of sex, age, race or number of children. Although some variation is evident, across almost all categories within these personal characteristic variables, nursing homes are the primary employment setting, followed by hospitals, with physician and dentist offices being the third most frequent employer. Exceptions to this

pattern are proportionately fewer male LPNs, compared with females, working in physicians' and dentists' offices (3.2% and 12.3%, respectively) and proportionately more male LPNs (10.8%) than female LPNs (7.2%) working in home health. Asian nurses are proportionately more likely to work in nursing homes and Native Americans are more likely to report employment in home health.

Table 3.11 shows that, compared with males, female LPNs are proportionately more represented in charge nurse (18% vs. 12.9%) and office nurse (14.4% vs. 3.2%) positions, whereas male LPNs are slightly more represented in staff nurse positions (48.4% vs. 42.6%). Younger LPNs (less than 30 years of age) are also proportionately more likely to report charge nurse or office nurse positions compared with older nurses. In terms of race, Native American LPNs are least likely to report holding staff nurse positions (18.8% compared with 41.4% or more of other racial groups); are more likely to report a home care position (12.5% vs. 9.9% or less for other groups); and, along with Asian/Pacific Islanders, are more likely to report a charge nurse position (31.3% and 29.4% vs. 18.2% or less). Asian/Pacific Islanders are least likely to report holding office nurse positions (3.9% vs. 6.3% or more for other racial categories). Number of children does not appear to be related to the type of nursing position a LPN holds.

Table 3.1

Total Years of Employment as an LPN by 1996 Employment Location (HSA)

1996 Employment Location	N	Total Years Employed					
		1-5	6-10	11-15	16-20	21-35	> 35
Illinois HSA 1	274	25.2	21.2	12.8	19.7	19.0	2.2
Illinois HSA 2	295	22.7	18.3	16.9	17.3	23.7	1.0
Illinois HSA 3	395	24.6	25.6	14.2	16.7	17.5	1.5
Illinois HSA 4	333	20.1	20.7	16.8	19.8	21.0	1.5
Illinois HSA 5	385	32.7	24.7	9.6	13.5	18.7	0.8
Illinois HAS 6	352	23.3	25.3	11.6	15.3	22.7	1.7
Illinois HAS 7	366	18.0	19.7	14.8	17.8	28.1	1.6
Illinois HSA 8	90	8.9	20.0	14.4	11.1	42.2	3.3
Illinois HAS 9	135	23.0	21.5	10.4	20.7	22.2	2.2
Illinois HSA 10	57	36.8	12.3	3.5	12.3	33.3	1.8
Illinois HSA 11	179	31.8	19.6	15.6	15.6	17.3	0.0
Total Illinois	2861	24.1	21.9	13.5	16.8	22.1	1.5
Other USA	327	20.2	20.2	15.0	18.0	25.4	1.2

Note: Results are reported as percentages of LPNs reporting working in this geographic location; e.g., 25.2% of 274 LPNs working in HSA 1 have a maximum of 5 years total LPN employment. Percentages may not sum to 100% due to rounding. HSA = Health Service Area.

Table 3.2

Years of Employment as an LPN in Illinois by 1996 Employment Location (HSA)

1996 Employment Location	N	Total Years Employed					
		1-5	6-10	11-15	16-20	21-35	> 35
Illinois HSA 1	270	28.9	20.7	12.6	18.1	18.5	1.1
Illinois HSA 2	295	26.1	17.3	15.6	16.3	23.7	1.0
Illinois HSA 3	398	27.6	28.4	12.1	14.3	16.3	1.3
Illinois HSA 4	339	24.8	22.4	13.3	18.6	19.5	1.5
Illinois HSA 5	384	37.2	24.2	9.6	12.8	15.6	0.5
Illinois HSA 6	352	26.7	25.0	10.8	13.9	22.4	1.1
Illinois HSA 7	369	22.0	24.7	13.6	14.6	23.6	1.6
Illinois HSA 8	92	17.4	25.0	12.0	10.9	33.7	1.1
Illinois HSA 9	135	30.4	21.5	8.9	17.0	20.7	1.5
Illinois HSA 10	58	44.8	15.5		8.6	29.3	1.7
Illinois HSA 11	180	35.0	21.7	14.4	13.9	15.0	
Total Illinois	2872	28.3	23.3	12.1	15.0	20.2	1.1
Other USA	247	36.4	25.1	13.0	10.9	13.4	1.2

Note: Results are reported as percentages of LPNs reporting working in this geographic location; e.g., 28.9% of 270 LPPNs working in HSA 1 have a maximum of 5 yrs total LPN employment in Illinois. HSA = Health Service Area.

Table 3.3

Principal Nursing Employment Setting and Agency Type by 1996 Employment Location (HSA)

Setting	Employment Location (HSA)											Total IL	Other USA
	1	2	3	4	5	6	7	8	9	10	11		
N	278	298	401	331	374	345	372	93	136	58	180	2866	326
Hospital	21.2	16.1	24.2	17.5	21.7	27.8	15.3	16.1	19.9	20.7	17.2	20.3	16.6
Hospital Clinic	2.5	2.0	0.5	3.0	2.1	5.8	3.5	1.1	0.7	1.7	3.3	2.6	2.8
Clinic	5.0	2.4	6.7	3.0	4.0	4.1	4.6	7.5	0.7	1.7	2.2	4.1	5.5
HMO	1.1		2.2		0.3	7.8	4.0	3.2				2.0	2.2
Emergencycenter	0.7	0.7	1.5	0.9	0.5	1.5	0.3		2.2		0.6	0.9	0.9
Physicians'/Dentists' Ofc.	13.0	14.1	12.2	16.0	13.1	7.5	18.6	18.3	11.8	6.9	10.6	13.3	8.3
Nursing Home/Ext. Care	40.3	46.6	34.7	42.3	35.3	24.1	31.7	41.9	41.9	43.1	46.7	37.3	40.5
Home Health	6.1	7.1	5.7	5.1	8.3	7.0	7.5	2.2	11.8	12.1	7.2	6.9	7.7
Public/Community Health	1.1	0.7	1.8	1.8	3.7	1.7			1.5		1.7	1.5	1.2
Occupational Health	0.7	0.3	0.8	2.1	0.3	1.2	1.3	1.1		5.2	0.6	1.0	1.5
Student Health	1.1	0.3	0.8	0.9	2.4	0.9	1.3	3.2	0.7	3.5	0.6	1.2	1.8
Self Employed	0.7	2.4	1.5	0.6	0.5	0.9	0.8		0.7			0.9	1.8
Nursing or Health Assoc.		0.3	0.3		0.3	0.6	0.3				1.1	0.3	
Psychiatric Hospital	0.7	0.3			0.5	2.0	1.6	1.1	1.5		1.7	0.8	1.8
Substance Abuse Fac.	0.7	0.7	0.8	0.9	0.3	3.5	0.8	1.1	1.5		0.6	1.1	1.2
Other	5.0	6.04	6.48	5.74	6.68	3.77	8.33	2.15	5.15	5.17	6.11	5.9	6.13
Agency Type													
N	269	295	389	328	367	348	368	93	131	57	179	2824	334
Federal Gov't	1.5	2.4	1.8	0.9	3.8	4.9	5.2	6.5	0.8	1.8	2.8	3.0	9.0
State Gov't	4.5	5.4	13.1	5.5	8.7	9.5	6.5	5.4	13.0	7.0	8.4	8.0	5.4
County/City Gov't	9.3	11.2	6.2	7.9	10.9	10.1	3.8	11.8	4.6	17.5	7.8	8.4	5.7
Private Not-For-Profit	38.7	32.2	39.9	39.9	32.4	32.5	28.0	23.7	41.2	26.3	33.0	34.4	31.4
Private For-Profit	46.1	48.8	39.1	45.7	44.1	43.1	56.5	52.7	40.5	47.4	48.0	46.2	48.5

Note: N=Number of LPNs reporting this employment location, e.g., 21.2% of 278 LPNs working in Illinois HSA 1 reported currently working in a hospital. HSA=Health Service Area.

Table 3.4

Principal Nursing Position by 1996 Employment Location (HSA)

Principal Position	Employment Location (HSA)											Total IL	Other USA
	1	2	3	4	5	6	7	8	9	10	11		
N	287	309	413	342	396	369	382	96	139	60	187	2980	348
Staff Nurse	42.6	45.4	42.7	37.3	39.2	49.3	40.3	51.1	52.6	44.8	43.1	43.2	40.92
Assistant to Physician	4.0	1.0	2.3	4.9	2.9	5.4	5.2	6.5	3.7	3.5	6.1	3.9	4.92
Technician	0.4	1.0		1.2	1.3	0.6	1.1	2.2	0.7	1.7	2.2	0.9	0.62
Charge Nurse/Team Ldr	19.3	17.6	19.3	20.9	18.1	15.3	13.4	7.6	14.6	19.0	19.3	17.3	20.62
Inservice Education Instr.			1.3	0.3		0.3	0.5				1.1	0.4	0.62
Home Care Nurse	5.8	6.3	5.7	5.5	7.2	6.8	4.9	3.3	8.8	13.8	5.0	6.2	8
Utilization Review Nurse		0.3	0.5	0.6	1.1	2.3	1.6	1.1				0.8	0.31
Consultant	0.4	0.3	0.3	0.3	0.3	0.6	0.3					0.3	0.62
Private Duty Nurse	1.5	2.3	1.3	1.5	1.9	1.7	3.0		3.7		2.8	1.9	1.85
Office Nurse	16.0	15.9	16.5	17.6	16.5	9.4	20.7	18.5	10.2	6.9	9.9	15.3	12
School Nurse	1.5		0.3	1.2	1.9	0.9	1.1	3.3	0.7	3.5	0.6	1.1	2.15
Other	8.7	9.9	10.0	8.8	9.6	7.4	7.9	6.5	5.1	6.9	9.9	8.7	7.38

Note: N=Number of LPNs reporting employment in this Health Service Area (HSA), e.g., 42.6% of 287 LPNs employed in HSA 1 reported staff nurse as their position title. HSA=Health Service Area.

Table 3.5

Principal Nursing Employment Setting and Agency Type By Years Worked In Nursing, With Current Employer and in Current Position

Setting	1 - 5 Years				6 - 10 Years				11 - 15 Years				16 - 20 Years				> 20 Years			
	Employer		Position		Employer		Position		Employer		Position		Employer		Position		Employer		Position	
	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
Hospital	4.2	3.7	3.1	1.3	7.4	4.5	6.3	2.4	9.8	5.0	8.6	4.8	15.1	6.9	12.4	6.5	20.4	9.9	18.6	10.4
Hospital Clinic	3.1	2.0	2.6	0.9	5.5	2.6	5.0	2.9	6.8	4.8	6.3	5.2	13.8	9.0	8.2	5.6	17.9	13.2	15.4	12.8
Clinic	2.4	1.0	2.3	1.1	5.4	4.1	4.8	3.1	6.7	4.4	6.1	4.3	6.2	3.7	5.9	3.5	10.5	7.7	9.1	7.1
HMO	2.6	0.8	2.6	0.8	4.8	1.1	4.8	1.1	4.9	3.1	4.6	2.7	6.5	3.6	5.5	4.1	5.9	4.0	4.6	2.8
Emergencycenter	4.2	1.8	3.2	0.8	5.3	2.1	5.3	2.1	13.2	10.3	9.6	5.3	10.8	7.4	10.8	7.4	14.4	9.2	12.5	8.7
Physician/Dentist Ofc.	2.6	1.3	2.5	1.2	5.0	2.8	4.9	2.7	6.8	3.7	6.2	3.5	8.4	5.6	7.4	5.3	10.4	7.6	9.9	7.5
Nursing Home	3.5	2.2	2.9	1.3	5.4	3.5	4.8	2.8	7.2	5.3	6.0	4.0	9.1	6.5	7.9	5.7	9.8	7.6	8.8	7.3
Home Health	3.1	1.7	2.6	1.0	4.5	2.3	4.3	2.2	4.9	2.6	4.3	2.4	4.9	5.0	4.1	3.2	8.3	5.0	7.5	4.7
Public Health	3.0	1.1	3.0	1.1	3.4	1.6	3.4	1.6	6.6	3.1	5.5	3.2	6.6	6.0	5.7	4.7	12.6	9.4	11.2	9.6
Occupational Health	2.4	0.5	2.4	0.5					9.7	7.1	7.0	7.0	14.6	4.5	10.6	5.6	10.3	8.2	7.7	5.9
Student Health	2.5	0.6	2.3	0.5	3.5	2.2	3.5	2.2	6.4	4.2	6.2	4.3	7.2	4.3	6.8	4.4	12.6	11.3	12.6	11.3
Self Employed	2.5	0.7	2.5	0.7	2.7	0.8	2.7	0.8	7.4	4.4	7.4	4.4	5.8	6.0	5.8	6.0	5.6	4.1	5.6	4.1
Nursing/Health Assoc.	13.0	14.1	4.0	1.4	6.0		6.0						14.5	4.9	14.5	4.9	32.0	1.4	20.5	17.7
Psychiatric Hospital	5.3	2.8	3.5	1.3	9.9	4.7	6.4	1.1	7.7	11.2	4.5	4.0	7.1	6.3	7.1	6.3	18.2	7.3	15.0	7.5
Substance Abuse Fac.	7.8	11.5	2.3	1.0	4.8	4.2	3.4	2.7	5.5	3.1	5.1	3.5	5.8	3.7	5.5	3.7	5.5	4.3	5.3	4.5
Other	3.4	3.7	2.4	1.0	4.4	2.8	3.9	2.3	7.1	4.2	5.9	3.7	7.8	6.8	6.2	6.1	10.1	8.2	7.6	6.6
Agency Type																				
Federal Gov't	3.9	4.1	2.9	1.1	5.5	3.1	4.8	2.8	8.3	4.5	6.8	4.1	10.5	5.5	9.6	5.4	14.4	9.8	12.3	9.7
State Gov't	4.1	3.7	3.1	1.2	5.9	3.8	4.9	2.4	8.5	8.5	6.3	4.0	8.8	6.5	7.9	5.7	12.1	9.0	10.8	8.2
City/County Gov't	3.8	1.9	3.3	1.1	5.7	3.2	5.3	2.7	7.9	4.4	6.7	4.3	9.5	6.4	8.6	6.4	13.6	9.1	12.5	9.1
Private, Not-For-Profit	4.2	3.7	2.9	1.1	6.3	3.9	5.5	2.7	8.7	5.3	7.4	4.6	12.3	7.7	9.8	6.7	15.8	10.6	13.9	10.5
Private, For Profit	2.9	1.7	2.6	1.2	4.9	3.3	4.4	2.6	6.1	3.9	5.5	3.6	8.7	6.5	7.7	5.7	10.1	8.2	9.3	7.9

Note: Results are reported as mean and s.d. of years at current employer and within current position for each 5 year category of total years worked as an LPN. e.g., LPNs working in hospitals who have 1-5 total years of nursing experience reported a mean of 4.2 yrs with current employer (s.d.=3.7) and 3.1 mean years in their current position (s.d.=1.3).

Table 3.6

Principal Nursing Employment Setting and Agency Type by Percentage of Time Spent at Different Work Activities

Setting	N	Percent Time at Work Activities			
		Direct Patient Care		Staff Supervision	
		0%	>50%	0%	>50%
Hospital	751	3.2	87.3	67.5	2.5
Hospital Clinic	96	3.2	82.8	62.4	2.4
Clinic	157	1.3	72.5	69.3	1.4
HMO	72	7.8	71.9	65.0	5.0
Emergency Center	28		89.3	76.0	4.0
Physician/Dentists' Office	445	1.8	72.5	65.4	0.5
Nsg Home/Extended Care	1391	4.9	49.2	15.3	12.5
Home Health	270	6.2	79.2	76.4	3.0
Public Health	52	16.0	58.0	70.2	2.1
Occupational Health	38	16.7	36.1	67.7	
Student Health Svc.	48	13.0	56.5	72.5	
Self Employed	38	17.1	68.6	71.9	3.1
Nursing or Health Assoc.	11	18.2	45.5	36.4	18.2
Psychiatric Hospital	33	3.0	78.8	44.8	
Substance Abuse Fac.	43	7.3	61.0	48.6	
Other	234	18.8	48.3	55.1	7.1
Agency Type					
Federal Gov't	148	7.9	65.0	55.4	2.3
State Gov't	296	4.8	63.0	40.1	7.5
City/County Gov't	320	4.5	65.1	43.6	5.4
Private not-for-profit	1239	6.1	66.9	45.7	7.9
Private for-profit	1675	5.3	63.1	45.7	6.2

Note: N=Number of LPNs reporting this employment setting, e.g., 0.3% of 751 LPNs employed in hospitals reported spending no time at direct patient care activities.

Table 3.7

Principal Nursing Position by Percentage of Time Spent at Different Work Activities

Principal Position	N	<u>Percent Time at Work Activities</u>			
		Direct Patient Care		Staff Supervision	
		0%	>50%	0%	>50%
Staff Nurse	1581	2.2	75.2	43.7	5.8
Assistant to Physician	147	2.8	71.1	63.6	
Technician	35	9.1	72.7	78.6	
Charge Nurse/Team Ldr	667	4.1	41.7	9.6	15.6
Inservice Education	14	18.2		25.0	16.7
Home Care Nurse	240	3.8	81.9	76.2	1.9
Utilization Review Nurse	27	82.4		90.9	4.5
Consultant	13	60.0	10.0	45.5	
Private Duty Nurse	71	6.1	78.8	78.6	3.6
Office Nurse	515	2.8	73.5	67.0	0.9
School Nurse	43	7.5	70.0	67.6	
Other	340	25.9	36.2	54.2	7.0

Note: Results are expressed in percentages, e.g., 75.2% of 1,581 staff nurses reported spending over 50% of their time on direct patient care activities.

Table 3.8

Nursing Practice Specialty by Employment Location (HSA)

Specialty	Employment Location											Total IL	Other USA
	1	2	3	4	5	6	7	8	9	10	11		
N	287	309	413	342	396	369	382	96	139	60	187	2980	348
Administration	2.8	2.6	2.4	2.1	1.5	2.4	1.6	1.0	2.9		4.3	2.3	4.3
Obstetrics	6.6	2.9	6.5	8.5	7.8	12.7	7.6	5.2	6.5	3.3	7.0	7.4	3.5
Generalist	8.0	7.8	7.8	10.2	8.1	9.8	10.7	13.5	3.6	5.0	9.1	8.8	6.6
Geriatrics	50.9	58.3	49.4	50.6	49.0	40.9	42.7	45.8	58.3	58.3	59.4	49.7	49.7
Pediatrics	13.2	10.0	11.6	8.8	10.1	19.5	14.7	13.5	16.6	13.3	10.7	12.7	10.9
Medical	23.7	23.0	28.3	19.6	27.0	37.1	29.8	27.1	28.1	16.7	24.1	26.9	24.4
Psychiatric	6.3	4.2	8.2	3.5	7.6	15.2	11.5	10.4	13.0	1.7	10.7	8.6	11.2
Surgical	15.0	12.6	13.3	12.6	17.2	18.4	16.0	16.7	16.6	18.3	13.9	15.2	12.1
Public/Community	3.8	3.9	5.6	4.7	9.6	9.8	4.2	5.2	5.0	5.0	4.3	5.9	5.8
Orthopedics	8.4	4.9	4.6	5.9	5.6	6.2	7.6	8.3	5.8	3.3	8.6	6.2	4.0
Other	19.2	18.8	21.1	17.3	19.2	21.1	23.3	20.8	23.7	15.0	19.8	20.2	21.6

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Note: Results are expressed as percentages, e.g., 2.8% of 287 LPNs employed in Health Service Area 1 reported a practice specialty in Administration. Results within HSAs do not sum to 100% due to the multiple response format (i.e., nurses can list more than 1 practice specialty).

Table 3.9

Principal Nursing Position by Hourly or Monthly LPN Full-Time Salary

Principal Position	Hourly Nursing Salary			Monthly Nursing Salary		
	<u>N</u>	<u>Mean</u>	<u>s.d.</u>	<u>N</u>	<u>Mean</u>	<u>s.d.</u>
Staff Nurse	1281	\$12.56	7.77	71	\$2,037.23	587.85
Assistant To Physician Technician	111	\$11.35	2.54	7	\$2,061.29	835.29
Charge Nurse/Team Leader	30	\$12.30	2.85	23	\$2,219.65	733.82
In Service Education	552	\$12.64	8.45	16	\$1,875.69	971.46
Home Care Nurse	9	\$11.67	2.35	6	\$2,468.00	476.72
Utilization Review Nurse	184	\$13.21	3.92	4	\$1,562.50	1261.86
Consultant	14	\$15.41	3.79	28	\$1,687.43	637.19
Private Duty Nurse	12	\$18.00	13.09	11	\$1,230.00	634.74
Office Nurse	59	\$13.14	3.51	55	\$2,080.29	837.85
School Nurse	429	\$12.10	8.23			
Other	24	\$10.96	2.99			
Other	216	\$13.05	8.29			
Median	2925	\$12.00	7.58	222	\$2,000.00	756.16

Note: Results are reported as mean and standard deviations, e.g., LPNs with the position title 'staff nurse' reported an average hourly salary of \$12.56 with a standard deviation of \$7.77.

Table 3.10

Principal Nursing Employment Setting and Agency Type by Personal Characteristics

Setting	Sex		Age In Years				Race					Number of Children			
	Female	Male	<30	31-45	46-65	>65	Hispanic	Native American	Asian/Pacific Isldr.	African-American	White/Not Hispanic	0	1	2-4	>4
N	4392	114	338	1838	1925	292	83	23	55	676	3676	1009	928	1669	63
Hospital	20.2	25.8	19.4	19.6	21.6	22.7	18.6	25.0	13.7	25.5	19.4	18.6	21.3	19.5	16.0
Hospital Clinic	2.6	3.2	5.2	2.6	2.2	1.2	7.1	0.0	0.0	5.4	2.0	2.5	2.9	2.2	2.0
Clinic	4.2	5.4	5.2	3.9	4.5	2.3	7.1	6.3	2.0	3.5	4.2	3.5	4.1	4.5	4.0
HMO	2.0	1.1	1.4	1.8	2.3	0.6	5.7	0.0	0.0	4.8	1.3	2.0	2.2	1.7	6.0
Emergencycenter	0.7	1.1	1.4	0.9	0.6	0.6	0.0	0.0	0.0	0.9	0.8	0.4	0.4	1.2	0.0
Physician/Dentists' Office	12.3	3.2	13.2	12.4	12.4	6.4	8.8	0.0	3.9	3.3	14.0	11.0	12.4	14.0	10.0
Nsg Home/Extended Care	37.6	29.0	37.4	38.2	36.6	41.3	28.6	25.0	64.7	28.4	39.1	40.2	36.3	36.9	38.0
Home Care Agency	7.2	10.8	5.5	7.8	6.0	9.9	8.6	18.8	2.0	9.0	7.0	6.6	7.7	7.2	10.0
Public/Community Health	1.4	2.2	1.7	1.3	1.6	1.7	5.7	0.0	0.0	1.9	1.3	2.4	1.4	1.5	0.0
Occupational Health	1.1	0.0	1.0	1.0	1.2	0.0	0.0	6.3	0.0	0.7	1.1	1.5	1.2	0.9	4.0
Student Health Service	1.4	0.0	0.7	0.8	1.8	2.3	0.0	0.0	0.0	2.2	1.2	0.8	1.6	1.4	0.0
Self Employed	1.1	1.1	0.0	1.0	1.0	2.3	0.0	0.0	2.0	1.3	1.0	1.2	1.2	0.8	0.0
Nursing or Health Assoc.	0.3	1.1	0.4	0.3	0.3	0.6	0.0	0.0	2.0	0.6	0.2	0.3	0.1	0.2	2.0
Psychiatric Hospital	0.8	3.2	1.0	0.9	0.7	1.2	2.9	0.0	5.9	1.9	0.5	0.8	0.4	1.5	0.0
Substance Abuse Facility	1.2	1.1	0.4	0.8	1.4	1.2	2.9	0.0	2.0	4.2	0.5	1.7	1.2	1.0	2.0
Other	6.1	11.8	6.2	6.6	5.8	5.8	4.3	18.8	0.0	6.5	6.4	6.5	5.6	5.7	6.0
Agency Type															
Federal Gov't	3.8	10.9	5.0	4.0	3.7	4.4	7.6	16.7	2.0	9.2	2.8	4.4	4.2	3.2	2.0
State Gov't	7.9	14.1	8.9	9.4	7.3	2.8	10.6	0.0	10.0	12.3	7.2	8.0	9.1	8.5	11.8
County/City Gov't	9.0	0.0	8.9	8.3	8.6	10.0	7.6	0.0	0.0	14.1	7.9	8.8	8.1	8.7	11.8
Private Not-For-Profit	33.8	29.4	27.9	32.0	35.4	43.3	50.0	11.1	38.0	27.4	34.7	32.9	33.7	31.7	27.5
Private For-Profit	45.6	45.7	49.3	46.4	45.0	39.4	24.2	72.2	50.0	37.0	47.4	45.9	44.8	48.0	47.1

Note: Results are reported as percentages, e.g., 20.2% of 4392 female LPNs reported their principal employment setting as 'hospital.'
 Percentages may not sum to 100 due to rounding.

Table 3.11

Principal Nursing Position by Personal Characteristics

Position	Sex		Age In Years				Race					Number of Children			
	Female	Male	<30	31-45	46-65	>65	Hispanic	Native American	Asian/Pacific Islr.	African-American	White/Not Hispanic	0	1	2-4	>4
N	4392	114	338	1838	1925	292	83	23	55	676	3676	995	912	1642	63
Staff Nurse	42.6	48.4	44.5	43.0	42.8	45.4	47.9	18.8	54.9	48.2	41.4	42.2	43.7	41.1	44.2
Assistant to Physician	4.0	2.2	4.8	4.8	3.3	2.3	7.0	6.3		3.7	4.0	2.7	3.4	4.7	5.8
Technician	0.9	2.2	0.3	0.8	1.2	0.6	2.8	6.3		0.9	0.9	1.1	0.8	1.0	
Charge Nurse/Team Ldr	18.0	12.9	20.0	16.6	18.5	19.0	11.3	31.3	29.4	17.7	18.2	19.2	18.3	17.4	7.7
Inservice Education Instr.	0.4	1.1	0.3	0.5	0.3	0.6		6.3		0.7	0.3	0.3	0.4	0.5	1.9
Home Care Nurse	6.4	7.5	4.1	6.8	5.7	10.9	9.9	12.5	2.0	7.4	6.3	5.9	6.8	6.6	11.5
Utilization Review Nurse	0.7	1.1		0.8	0.8	0.6				1.5	0.6	1.2	0.8	0.4	
Consultant	0.3	1.1	0.3	0.4	0.3					0.4	0.3	0.4	0.3	0.4	
Private Duty Nurse	1.9	3.2	2.4	2.3	1.4	1.1	1.4	6.3		2.2	1.9	1.7	1.8	1.8	
Office Nurse	14.4	3.2	16.6	13.8	14.6	6.9	8.5	6.3	3.9	6.3	15.8	12.8	15.0	16.0	15.4
School Nurse	1.2		0.7	1.0	1.2	1.7				2.0	1.0	0.5	1.5	1.3	
Other	9.1	17.2	5.9	9.1	9.8	10.9	11.3	6.3	7.8	8.8	9.3	12.0	7.3	8.8	13.5

Note: Results are reported as percentages, e.g., 42.6% of 4392 female LPNs reported their position title as 'staff nurse.'
Percentages may not sum to 100 due to rounding.

Chapter Four

Educational Preparation of Licensed Practical Nurses in Illinois

The first part of this final chapter describes the nursing education of Licensed Practical Nurses in Illinois in relation to employment characteristics, length of nursing experience, and nursing salary. The last section examines pursuit of an academic degree by practice and personal characteristics.

The practical nursing education of LPNs by residential HSA is shown in Table 4.1. Community college (43.5%) and vocational/technical (43.4%) programs continue to educate well over four-fifths of Illinois LPNs, a trend that is clear in Table 4.1a. Since 1989 community college programs have gradually attracted more students as less structured avenues (high school, informal, and other programs) have phased out.

Table 4.1a

Percent of LPNs across Categories of Basic Nursing Education in
Four Biennial Surveys

<u>Nursing Education</u>	<u>Year of Survey Report</u>				
	<u>1989</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>
High School	5.7	5.1	3.3	4.1	4.5
Hospital	6.2	6.5	4.5	5.5	5.8
Community College	37.8	41.2	45.0	46.0	43.5
Vocational/Technical	41.6	42.1	44.3	41.3	43.4
No Formal Program*	3.6	2.7	0.6	1.0	1.1
Other	5.0	3.4	2.3	2.1	2.0

* In 1989 and 1991 this category was referred to as "waiver."

Table 4.2 shows educational preparation by employment setting. LPNs employed in nursing or health associations, HMOs, psychiatric hospitals, public health, and occupational health more often report vocational/technical education (63%, 58.6%, 55.2%, 54.9%, and 54.1%, respectively). LPNs who work in HMOs, nursing or health associations, and substance abuse facilities less often report community college degrees (20%, 27.3%, and 29.3%, respectively). In terms of the three major employers of LPNs across four of the five biennial surveys, Table 4.2a shows that the proportion of vocational/technical graduates in hospitals has remained consistent at about 45%

and about 5% higher than the proportion of LPNs with a community college education. LPNs employed in nursing homes appear somewhat more likely to have a community college education. In doctors' offices, the proportion of LPNs with a community college or a vocational education varies from survey to survey.

Table 4.2a

Percent of LPNs Educated in Two Types of Programs and Employed in Three Major Settings across Four Biennial Surveys

Employment Setting	Year of Survey Report									
	1989		1991		1993		1995		1997	
	CC	VT			CC	VT	CC	VT	CC	VT
Nursing home	44.0	36.8	-		45.4	42.4	51.2	39.7	47.1	42.9
Hospital	33.8	45.2	-		40.8	46.6	40.6	45.6	40.5	46.7
Doctor's office	40.9	38.9	-		42.6	45.6	44.8	42.2	41.0	44.0

Note: 1991 data are not available. CC = Community College program; VT = Vocational/Technical program.

As shown in Table 4.3, proportionately more LPNs who work as utilization review nurses, private duty nurses, and inservice educators report a vocational/technical education (69.2%, 50.7%, and 50%, respectively) compared to LPNs with a community college education (19.2%, 37.7%, and 35.7%, respectively). In terms of agency size, LPNs with a community college education are more concentrated in smaller hospitals (under 100 beds) and proportionately more LPNs with a vocational/technical education are employed in larger hospitals (over 200 beds).

Table 4.4 summarizes LPNs' length of nursing experience and current employment in relation to their practical nursing education. As was true in the 1995 survey, there is little variation of note across educational categories. That is, the average number of years with employer and in current position is comparable across categories, with LPNs with no formal nursing education lagging behind by three to four years (i.e., least well retained).

Regardless of nursing education, close to two-thirds of LPNs report direct patient care occupying more than 50% of their work activities (Table 4.5). Staff supervision, on the other hand, continues to not be a substantial responsibility for a majority of LPNs,

with those licensed by waiver (no formal education) being the most likely to report this activity at greater than 50% of their usual work day.

Similar to the 1995 survey, nursing education does not appear to be related to LPNs' reported specialty (Table 4.6). Across all educational categories, geriatrics is the most commonly reported specialty (range, 41.5% [other] to 59.4% [no formal program]), medical nursing is second (range, 22% [other] to 34.4% [no formal program]), and surgical nursing is third (range, 12.2% [other] to 19.5% [hospital]).

Table 4.7 shows the annual salaries of full-time employed LPNs by educational preparation. Similar to 1995, across categories of education the highest proportion of LPNs earns from \$20,000 to \$24,999 per year (range: 40.1% for hospital education to 48.3% for high school education).

The 1997 data support some patterns in the distribution of educational preparation in relation to personal characteristics (Table 4.8) noted in past surveys. For example, younger (45 years of age and younger) LPNs are more prominent as community college graduates and older nurses are represented in higher proportions in vocational/technical programs. Similarly, proportionately more African-American LPNs report vocational/technical education, whereas Asian and white LPNs are more likely to report having received their practical nursing education in community colleges.

Study for an Academic Degree

The proportion of LPNs participating in study for an academic degree continues to gradually decline (Table 4.9), with 3.6% enrolled in full-time study and 8.8% reporting part-time study. Table 4.9a provides comparisons across the five biennial surveys. Full-time study appears to be declining gradually and those participating in part-time study have decreased by two to three percentage points since 1989.

Hospitals, hospital clinics, acute care centers, public health facilities, nursing or health associations, psychiatric hospitals, and substance abuse agencies are the employment settings where 15% or more of LPNs report participation in academic study (Table 4.10). About five percent more LPNs employed in state government agencies report pursuit of an academic degree compared with the 1995 survey, while the proportion of LPNs in other agency types has decreased by one to four percent. Similar to the 1995 survey, staff nurses and LPNs employed in larger hospitals are most represented among those pursuing an academic degree (Table 4.11). LPNs in private duty and office positions are among those least likely to pursue academic study.

Table 4.9a

Percent of LPNs Participating in Study for an Academic Degree in Five Biennial Surveys

<u>Level of Study</u>	<u>Year of Survey Report</u>				
	<u>1989</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>
Full-time	5.7	5.6	5.0	4.5	3.6
Part-time	11.6	12.0	12.7	9.5	8.8
Total	17.3	17.6	17.7	14.0	12.4

Continuing a trend reported in 1995, proportionately more males than females (23.7% and 13.4%, respectively), LPNs under 30 years (37.3% compared with 17.2% or less), and those who have never been married (23.4% compared with 16.8% or less) are studying either full- or part-time for an academic degree. Gross household income does not appear to be related to participation in academic study.

Table 4.1

1996 Residence HSA by Practical Nursing Education

Residence	N	High School	Hospital	Community College	Vocational/ Technical	No Formal Program	Other
Illinois HSA 1	312	1.3	3.2	41.7	51.3	1.3	1.3
Illinois HSA 2	365	4.7	7.9	61.4	22.7	0.8	2.5
Illinois HSA 3	462	4.5	2.6	26.0	63.9	1.1	1.9
Illinois HSA 4	385	2.9	2.6	37.1	54.5	1.0	1.8
Illinois HSA 5	474	3.8	3.0	72.6	17.7	1.1	1.9
Illinois HSA 6	410	11.0	6.3	18.8	58.0	1.2	4.6
Illinois HSA 7	403	5.7	9.2	45.4	37.2	0.0	2.5
Illinois HSA 8	118	5.1	17.8	33.9	40.7	0.8	1.7
Illinois HSA 9	189	5.8	5.8	45.0	41.3	1.6	0.5
Illinois HSA 10	76	1.3	3.9	80.3	13.2	1.3	0.0
Illinois HSA 11	181	3.3	1.7	16.0	76.8	1.1	1.1
Total Illinois	3375	4.5	5.8	43.5	43.4	1.0	1.8
Other, USA	307	5.2	2.3	42.0	48.2	0.7	1.6

Note: Results are expressed as percentages within geographic location (HSA=Health Service Area); e.g., 1.3% of 312 LPNs living in Illinois HSA 1 reported high school as their practical nursing education.

Table 4.2

Principal Nursing Employment Setting and Agency Type by Practical Nursing Education

Employment Setting	N	High School	Hospital	Community College	Vocational/ Technical	No Formal Program	Other
Hospital	719	5.4	5.1	40.5	46.7	0.6	1.7
Hospital Clinic	93	6.5	7.5	34.4	49.5	1.1	1.1
Clinic	149	6.0	4.7	38.9	44.3	1.3	4.7
HMO	70	10.0	7.1	20.0	58.6	2.9	1.4
Acute Care Center	28		3.6	46.4	46.4		3.6
Physician/Dentist Ofc	420	6.7	5.0	41.0	44.0	0.7	2.6
Nsg Home/Ext. Care	1336	3.9	3.2	47.1	42.9	1.1	1.8
Home Health	256	3.1	6.6	43.8	44.1	0.4	2.0
Public/Comm Health	51	2.0	3.9	37.3	54.9		2.0
Occupational Emp	37		10.8	32.4	54.1		2.7
Student Health Svc	44	2.3	2.3	47.7	38.6	2.3	6.8
Self Employed	37	2.7		40.5	48.6	5.4	2.7
Nursing or Health Assoc	11	9.1		27.3	63.6		
Psychiatric Hosp	29			44.8	55.2		
Substance Abuse	41	4.9	9.8	29.3	51.2		4.9
Other	221	5.9	3.2	38.9	48.0	0.9	3.2
Agency							
Federal Gvnt	143	3.5	3.5	45.5	44.8	0.7	2.1
State Gvnt	284	4.9	2.1	50.7	39.4	1.1	1.8
County/City Gvnt	306	6.2	4.2	43.8	42.2	1.3	2.3
Private Not-For-Profit	1178	5.0	5.2	39.5	47.5	0.6	2.2
Private For-Profit	1594	4.7	4.7	41.7	45.5	1.0	2.3

Note: Results are expressed as percentages within employment setting; e.g., 5.4% of 719 LPNs working in hospitals reported high school as their practical nursing education.

Table 4.3

Principal Nursing Position and Hospital Bed Capacity by Practical Nursing Education

Principal Nursing Position	N	High School	Hospital	Community College	Vocational/ Technical	No Formal Program	Other
Staff Nurse	1528	4.4	4.5	42.7	45.9	0.9	1.6
Assistant To Physician Technician	139	7.9	3.6	36.0	48.9	0.7	2.9
Charge Nurse/Team Leader	638	4.4	3.1	44.5	44.5	0.9	2.5
In Service Education	14		7.1	35.7	50.0		7.1
Home Care Nurse	227	3.5	6.2	43.6	44.9		1.8
Utilization Review	26	3.8	7.7	19.2	69.2		
Consultant	13	15.4		46.2	38.5		
Private Duty Nurse	69	1.4	7.2	37.7	50.7		2.9
Office Nurse	488	6.6	4.1	41.6	44.9	0.6	2.3
School Nurse	39	2.6	2.6	53.8	33.3	2.6	5.1
Other	316	5.4	4.7	40.8	42.7	2.2	4.1
<i>Bed Capacity</i>							
1-99	534	3.0	3.6	50.4	40.6	0.6	1.9
100 - 199	586	4.6	3.9	44.5	44.0	1.7	1.2
200 - 299	375	5.1	6.7	39.2	46.9		2.1
300 - 399	180	6.7	2.8	35.0	51.1	1.7	2.8
400-499	87	8.0	3.4	33.3	54.0		1.1
>500	140	5.0	2.1	35.0	55.7	0.7	1.4

Note: Results are expressed as percentages within principal nursing position and bed capacity; e.g., 4.4% of 1528 LPNs working as staff nurses reported high school as their practical nursing education.

Table 4.4

**Mean Years Worked in Nursing with Current Employer and In Current Position by
Practical Nursing Education**

Years In Nursing	Number of Years:		High School	Hospital	Community College	Vocational/ Technical	No Formal Program	Other
1-5	w/Employer	Mn	3.5	5.2	3.6	3.4	3.5	4.1
		s.d.	(1.5)	(5.2)	(2.6)	(3.1)	(2.1)	(4.0)
	In Position	Mn	3.2	2.9	2.9	2.7	2.5	2.5
		s.d.	(1.2)	(1.3)	(1.2)	(1.2)	(0.7)	(1.2)
6-10	w/Employer	Mn	5.7	8.0	5.8	5.2	4.4	4.9
		s.d.	(2.6)	(6.6)	(3.9)	(3.4)	(3.2)	(3.0)
	In Position	Mn	5.4	6.5	5.1	4.6	3.4	4.7
		s.d.	(2.5)	(3.4)	(2.6)	(2.6)	(2.9)	(2.9)
11-15	w/Employer	Mn	6.1	4.9	7.9	7.1	6.0	7.1
		s.d.	(3.7)	(4.1)	(4.9)	(5.1)	(5.7)	(3.9)
	In Position	Mn	5.7	4.9	6.8	6.1	3.0	5.7
		s.d.	(3.8)	(4.1)	(4.1)	(4.2)	(1.4)	(3.9)
16-20	w/Employer	Mn	12.3	10.7	10.3	9.7	6.5	7.8
		s.d.	(7.4)	(10.0)	(7.0)	(6.8)	(2.1)	(5.8)
	In Position	Mn	10.7	8.0	8.5	8.4	6.5	7.1
		s.d.	(6.4)	(5.4)	(6.2)	(6.3)	(2.1)	(5.5)
over 20	w/Employer	Mn	13.0	13.4	13.2	12.8	8.7	11.6
		s.d.	(9.8)	(11.2)	(8.8)	(9.8)	(8.0)	(8.2)
	In Position	Mn	11.1	12.3	11.5	11.6	8.7	10.8
		s.d.	(9.4)	(10.7)	(8.5)	(9.6)	(8.0)	(8.1)

Note: Results are expressed as mean (and standard deviation) years within each 5-year experience group for which LPNs have worked for current employer and within current position. For example, LPNs with practical nursing education in high school who have worked 1-5 years in nursing have a mean of 3.5 years with current employer.

Table 4.5

Percentage of Time Spent at Different Work Activities by Practical Nursing Education

Work Activities		High School	Hospital	Community College	Vocational/ Technical	No Formal Program	Other
Direct Patient Care							
	N	157	145	1431	1497	31	71
0%		0.6	0.7	0.3	0.2		1.4
>50%		68.2	69.7	67.2	70.4	64.5	63.4
Staff Supervision							
	N	106	68	903	864	19	38
0%		15.1	10.3	11.3	10.5	15.8	5.3
>50%		14.2	8.8	10.4	11.0	10.5	13.2

Note: Results are expressed as percentages of LPNs reporting this educational preparation; e.g., 68.2% of 157 LPNs whose practical nursing education is high school reported spending more than 50% of their time in direct patient care.

Table 4.6

Nursing Practice Specialty by Practical Nursing Education

Specialty		High School	Hospital	Community College	Vocational/ Technical	No Formal Program	Other
	N	176	164	1528	1640	32	82
Administration		2.3	3.0	2.1	3.0	9.4	2.4
Obstetrics		8.5	6.7	6.2	7.6	3.1	7.3
General		10.2	12.2	7.7	8.5	6.3	9.8
Geriatrics		46.0	42.7	55.9	48.4	59.4	41.5
Pediatrics		16.5	14.0	12.2	12.7	6.3	7.3
Medical		31.3	32.9	26.4	27.1	34.4	22.0
Psychiatric		10.2	6.1	9.0	10.7	9.4	9.8
Surgical		14.8	19.5	14.7	15.7	15.6	12.2
Public/Comm Health		5.1	4.9	5.2	7.4	9.4	7.3
Orthopedics		6.3	6.7	5.1	7.0	3.1	1.2
Other		26.1	23.8	17.9	20.5	31.3	31.7

Note: Results are reported as percentages of LPNs reporting this educational preparation; e.g., 46% of 176 LPNs whose practical nursing education is high school reported their practice specialty as "Geriatrics."

Table 4.7

Practical Nursing Education by Annual Income from Full Time Principal Nursing Position and Total Years Experience as an LPN

	N	Annual Full Time Nursing Salary							Yrs Experience	
		less than \$10,000	\$10,000 \$14,999	\$15,000 \$19,999	\$20,000 \$24,999	\$25,000 \$29,999	\$30,000 \$34,999	\$35,000 and up	Mean	S.D.
High School	117	0.5	1.4	7.1	48.3	23.7	12.3	6.6	17.83	10.42
Hospital	97	0.5	0.9	13.7	40.1	24.1	12.7	8.0	22.55	10.42
Community College	1018	0.2	2.3	17.7	47.1	17.3	9.6	5.9	11.79	8.06
Vocational/Technical	1077	0.1	1.9	10.2	47.0	24.5	10.6	5.7	15.21	10.12
No Formal Program	24	2.6	2.6	15.4	46.2	15.4	10.3	7.7	15.36	10.62
Other	56	0.0	0.0	7.8	42.2	26.7	13.3	10.0	17.16	11.65

Note: Results are reported as percentages of LPNs reporting this educational preparation; e.g., 7.1% of 117 LPNs whose practical nursing education was high school reported earning a full-time annual nursing salary between \$15,000 and \$19,999.

Table 4.8

Personal Characteristics by Practical Nursing Education

Personal Characteristics	N	High School	Hospital	Community College	Vocational/ Technical	No Formal Program	Other
<i>Sex</i>							
Female	4199	5.2	5.2	42.4	44.2	1.0	2.0
Male	110	2.7	5.5	36.4	48.2		7.3
<i>Age</i>							
< 30	330	8.8	0.9	47.3	41.2	0.3	1.5
31 - 45 Years	1785	4.1	2.8	48.6	41.5	0.9	2.1
46 - 65 Years	1830	4.7	7.6	37.0	47.7	0.9	2.1
>65 Years	264	8.0	8.0	30.3	50.4	0.8	2.7
<i>Race</i>							
Hispanic	80	6.3	11.3	36.3	41.3		5.0
Native American	20			45.0	45.0		10.0
Asian/Pacific	55	9.1	1.8	49.1	29.1	1.8	9.1
African-American	638	7.5	4.7	21.9	62.2	0.8	2.8
White Not Hispanic	3509	4.6	5.2	45.8	41.6	1.0	1.9
<i>Marital Status</i>							
Married	2934	4.8	5.5	43.7	42.9	0.9	2.2
Separated	104	7.7	9.6	30.8	50.0		1.9
Widowed	204	7.8	7.8	31.9	49.0	0.5	2.9
Divorced	721	4.6	4.0	42.9	46.2	0.8	1.5
Never Married	349	6.3	2.9	36.7	49.9	1.4	2.9
<i>Number of Children</i>							
None	956	6.2	6.5	38.5	46.5	0.8	1.5
1	891	3.7	4.8	44.2	44.3	1.1	1.8
2-4	1610	4.7	4.0	45.7	42.6	0.8	2.2
> 4	60	5.0	5.0	36.7	51.7	1.7	
<i>Gross Household Income</i>							
Less than \$9,000	383	4.7	5.7	47.8	37.6	1.3	2.9
\$9,000 - \$14,999	971	3.9	3.1	46.2	44.1	1.1	1.5
\$15,000 - \$29,999	1778	6.2	4.8	39.2	47.1	0.6	2.1
\$30,000 - \$49,999	460	4.3	6.1	44.8	40.7	0.9	3.3
\$50,000 and over	514	4.1	8.4	38.7	46.3	0.8	1.8

Note: Results are reported as percentages; e.g., 5.2% of 4199 female LPNs reported their practical nursing education was in a high school.

Table 4.9

**1996 Residence HSA by Extent of Participation in Study
for an Academic Degree**

Residence	N	Enrolled Full Time	Enrolled Part Time	Not Enrolled
Illinois HSA 1	324	3.4	4.6	92.0
Illinois HSA 2	375	2.7	7.2	90.1
Illinois HSA 3	486	1.6	9.9	88.5
Illinois HSA 4	395	5.1	9.1	85.8
Illinois HSA 5	494	4.0	10.1	85.8
Illinois HSA 6	426	7.5	11.7	80.8
Illinois HSA 7	415	4.8	9.9	85.3
Illinois HSA 8	121	1.7	7.4	90.9
Illinois HSA 9	195	3.1	8.7	88.2
Illinois HSA 10	81	1.2		98.8
Illinois HSA 11	184	4.3	9.8	85.9
Total Illinois	3496	3.6	8.8	88.4
Other USA	315	3.5	10.2	86.3

Note: Results are expressed as percentages; e.g., 3.4% of 324 LPNs living in HSA 1 reported being currently enrolled full-time in an academic program.

Table 4.10

**Principal Nursing Employment and Agency Type by
Extent of Participation in Study for an Academic Degree**

Setting	N	Enrolled Full Time	Enrolled Part Time	Not Enrolled
Hospital	746	5.4	10.2	84.5
Hospital Clinic	95	5.3	13.7	81.1
Clinic	156	1.9	4.5	93.6
HMO	69	4.3	10.1	85.5
Acute Care Center	27	7.4	11.1	81.5
Physician/Dentist Ofc.	442	0.7	4.5	94.8
Nsg Home/Ext. Care	1380	3.7	8.9	87.4
Home Health	269	4.8	7.8	87.4
Public/Comm Health	52		19.2	80.8
Occupational Emp	38		13.2	86.8
Student Health Svc	47	2.1	4.3	93.6
Self Employed	38	2.6	5.3	92.1
Nursing or Health Assc	11		18.2	81.8
Psychiatric Hospital	31	16.1	19.4	64.5
Substance Abuse	43	2.3	14.0	83.7
Other	233	3.0	12.0	85.0
<i>Agency Type</i>				
Federal Gvnt	147	2.7	13.6	83.7
State Gvnt	293	7.2	15.0	77.8
County/City Gvnt	318	3.5	8.5	88.1
Private Not-For-Profit	1226	3.7	9.0	87.4
Private For-Profit	1657	3.6	8.2	88.2

Note: Results are expressed as percentages; e.g., 5.4% of 746 LPNs working in a hospital reported full-time enrollment in study for an academic degree.

Table 4.11

**Principal Nursing Position and Hospital Bed Capacity by
Extent of Participation in Study for an Academic Degree**

Principal Position	N	Enrolled Full Time	Enrolled Part Time	Not Enrolled
Staff Nurse	1561	5.3	10.1	84.6
Assistant To Physician	146	2.1	6.2	91.8
Technician	35	2.9	11.4	85.7
Charge Nurse/Team Leader	660	3.3	9.7	87.0
In Service Education	14		21.4	78.6
Home Care Nurse	240	4.2	8.3	87.5
Utilization Review	27		7.4	92.6
Consultant	13		7.7	92.3
Private Duty Nurse	70	1.4	4.3	94.3
Office Nurse	510	1.8	5.5	92.7
School Nurse	42	2.4	9.5	88.1
Other	337	2.1	9.8	88.1
<i>Hospital Bed Capacity</i>				
1-99	553	4.2	9.9	85.9
100 - 199	610	3.9	9.2	86.9
200 - 299	381	3.7	10.8	85.6
300 - 399	186	8.6	13.4	78.0
400-499	90	8.9	6.7	84.4
>500	143	7.0	16.8	76.2

Note: Results are expressed as percentages; e.g., 5.3% of 1561 LPNs work a staff nurse reported full-time enrollment in study for an academic d

Table 4.12

**Personal Characteristics by Extent of Participation in
Study for an Academic Degree**

	N	Enrolled Full Time	Enrolled Part Time	Not Enrolled
<i>Sex</i>				
Female	4362	3.6	8.8	87.6
Male	114	12.3	11.4	76.3
<i>Age</i>				
< 30	337	11.6	15.7	72.7
31 - 45 Years	1829	5.5	11.6	82.8
46 - 65 Years	1914	1.3	5.3	93.4
>65 Years	284	1.8	4.9	93.3
<i>Race</i>				
Hispanic	83	7.2	12.0	80.7
Native American	23	4.3	21.7	73.9
Asian/Pacific	55	9.1	5.5	85.5
African-American	670	7.3	13.1	79.6
White Not Hispanic	3645	3.0	7.9	89.0
<i>Marital Status</i>				
Married	3037	3.2	8.5	88.3
Separated	107	7.5	9.3	83.2
Widowed	227	0.9	4.8	94.3
Divorced	742	3.6	10.0	86.4
Never Married	363	11.0	12.4	76.6
<i>Number of Children</i>				
None	1001	4.0	7.5	88.5
1	925	4.6	10.3	85.1
2-4	1654	4.0	9.6	86.5
> 4	63	4.8	6.3	88.9
<i>Gross Household Income</i>				
Less than \$9,000	402	6.2	6.5	87.3
\$9,000 - \$14,999	1017	3.5	9.6	86.8
\$15,000 - \$29,999	1842	3.7	9.3	87.0
\$30,000 - \$49,999	470	3.4	8.3	88.3
\$50,000 and over	532	3.6	10.0	86.5

Note: Results are expressed as percentages; e.g., 3.6% of 4362 female LPNs reported full-time enrollment in study for an academic degree.