IOWA DEPARTMENT OF PUBLIC HEALTH
BUREAU OF HEALTH CARE ACCESS
CENTER FOR HEALTH CARE WORKFORCE SHORTAGE

IOWA NURSING AND NURSING ASSISTIVE WORKFORCE INITIATIVE 2002 EMPLOYER SURVEY

BACKGROUND

The survey was conducted to collect current information about Iowa's nursing and nursing assistive workforce from the employer perspective. Building upon two successive years of data collection by the Iowa Council of Nurses, the Center for Health Care Workforce Shortage replicated the survey in December 2002, with minor formatting changes, at the request of its Advisory Committee and partner organizations.

METHOD

A total of 1,319 surveys were mailed to nurse executives of all Iowa hospitals, ambulatory clinics, long term care facilities, assisted living facilities, public health home health agencies and hospital-based home health agencies. After telephone follow-up, an overall return rate of 33% was achieved. The return rate by setting follows:

	Hospitals	Clinics	Long Term Care Facilities	Assisted Living Facilities	Public Health Home Health	Hospital-Based Home Health
Number of returns	55	122	149	58	23	32
Return rate	45%	26%	35%	36%	41%	33%

The center contracted with an external firm to conduct data entry. Data analysis was performed by the Iowa Department of Public Health Center for Health Statistics.

RESULTS

A summary of the data by setting type and position follows. The summary has been prepared using detailed results of both quantitative and qualitative data maintained in the center.

QUANTITATIVE DATA

TABLE 1. Vacancies by Position and Setting

	Hospitals		Clinics		Long Term Care Facilities		Assisted Living Facilities		Public Health Home Health		Hospital-Based Home Health	
	N	%	N	%	N	%	N	%	N	%	N	%
RN (FT)	207	5%	131	8%	56	7%	2	2%	4	5%	41	4%
RN (PT)	159	13%	105	9%	52	15%	2	4%	1	3%	34	8%
RN Total	**366**	**7%**	**236**	**8%**	**108**	**10%**	**4**	**3%**	**5**	**4%**	**75**	**5%**
LPN (FT)	27	7%	23	7%	35	5%	3	3%	2	12%	5	5%
LPN (PT)	16	9%	20	8%	62	19%	5	13%	1	9%	10	12%
LPN Total	**43**	**7%**	**43**	**8%**	**97**	**9%**	**8**	**6%**	**3**	**11%**	**15**	**8%**
UNLIC (FT)	36	3%	26	4%	141	5%	17	3%	9	7%	8	2%
UNLIC (PT)	36	7%	22	6%	248	13%	44	13%	11	6%	34	12%
UNLIC Total	**72**	**4%**	**48**	**4%**	**389**	**8%**	**61**	**7%**	**20**	**6%**	**42**	**7%**

N = Number of vacancies reported
% = Percent of budgeted positions reported vacant

TABLE 2. Vacancies by Position and Specialty Area

RN		LPN		UNLIC	
Area of Care	%	Area of Care	%	Area of Care	%
Medical/surgical	16%	Geriatric care	19%	Medical/surgical	7%
ER	7%	Medical/surgical	8%	Geriatric care	5%
Critical care	6%	Ambulatory	3%	Home care	4%
Management	6%	Management	2%	Ambulatory	2%
Maternal/child	6%	Home care	2%	Maternal/child	2%
Surgery/PAR	5%	Maternal/child	1%	Hospice	1%
Ambulatory	3%	ER	1%		
Home care	3%	Hospice	0.2%		
Non-direct care	2%				

TABLE 3. Wage by Position and Setting: Beginning, Average and Maximum

	Hospitals	Clinics	Long Term Care Facilities	Assisted Living Facilities	Public Health Home Health	Hospital-Based Home Health
RN						
Beginning	$15.16	$13.99	$15.75	$17.52	$14.63	$15.18
Average	$18.74	$16.77	$17.45	$17.86	$16.94	$18.73
Maximum	$22.74	$19.81	$19.97	$20.22	$21.17	$21.81
LPN						
Beginning	$10.82	$10.91	$13.34	$13.12	$11.06	$10.94
Average	$13.09	$12.97	$14.80	$14.52	$12.68	$13.16
Maximum	$15.14	$15.10	$16.30	$16.12	$14.79	$15.38
UNLIC						
Beginning	$8.20	$10.06	$8.64	$8.19	$7.86	$8.72
Average	$9.78	$12.10	$9.59	$8.98	$9.23	$9.57
Maximum	$11.54	$14.11	$11.28	$10.92	$10.92	$11.48

NOTE: Because methods for determining average wage varied among respondents, wage data collected by Iowa Workforce Development is provided below for comparison:

	Hospitals	Clinics	Nursing and Personal Care Facilities	Home Health (Public Health & Hospital-Based)
RN				
Beginning	$15.58	$13.29	$15.19	$15.29
Average	$19.86	$17.56	$17.44	$18.62
Maximum	$21.99	$19.70	$18.55	$20.28
LPN				
Beginning	$10.62	$10.66	$12.25	$12.02
Average	$12.91	$12.50	$13.77	$14.72
Maximum	$14.05	$13.41	$18.55	$16.07
UNLIC				
Beginning	$7.61	$8.10	$7.87	$8.54
Average	$9.22	$9.46	$9.10	$10.61
Maximum	$10.03	$10.15	$9.71	$11.63

TABLE 4. Age by Position and Setting

N = Number of employees in age category
% = Percent of employees in age category

	Hospitals		Clinics		Long Term Care Facilities		Assisted Living Facilities		Public Health Home Health		Hospital-Based Home Health	
RN	N	%	N	%	N	%	N	%	N	%	N	%
≤29	1,107	17%	572	23%	89	9%	12	8%	6	6%	193	13%
30-39	1,628	25%	612	24%	211	22%	40	26%	20	18%	398	27%
40-49	2,304	36%	766	30%	352	37%	52	34%	52	47%	540	37%
50-59	1,164	18%	494	20%	210	22%	35	23%	27	25%	282	19%
60-65	222	3%	58	2%	62	7%	9	6%	1	1%	45	3%
≥66	52	1%	28	1%	32	3%	4	3%	4	4%	9	1%
Total	**6,477**		**2,530**		**956**		**152**		**110**		**1,467**	
LPN	N	%	N	%	N	%	N	%	N	%	N	%
≤29	158	26%	80	14%	189	18%	21	16%	2	7%	41	19%
30-39	123	20%	122	22%	294	28%	38	28%	5	17%	33	15%
40-49	178	29%	190	34%	304	29%	38	28%	12	40%	62	29%
50-59	128	21%	128	23%	202	19%	26	19%	7	23%	56	26%
60-65	22	4%	31	6%	45	4%	5	4%	4	13%	15	7%
≥66	5	1%	10	2%	14	1%	6	5%	0	0%	7	3%
Total	**614**		**561**		**1,048**		**134**		**30**		**214**	
UNLIC	N	%	N	%	N	%	N	%	N	%	N	%
≤29	918	44%	360	35%	1,941	44%	329	42%	52	20%	266	36%
30-39	393	19%	262	26%	853	19%	176	22%	37	14%	136	19%
40-49	421	20%	241	24%	811	18%	143	18%	63	24%	152	21%
50-59	249	12%	126	12%	514	12%	88	11%	73	27%	108	15%
60-65	87	4%	26	3%	186	4%	33	4%	21	8%	47	6%
≥66	43	2%	11	1%	93	2%	22	3%	21	8%	21	3%
Total	**2,111**		**1,026**		**4,398**		**791**		**267**		**730**	

NOTE: Age data provided by employers is less accurate than data provided directly by nurses and unlicensed nursing assistive personnel. Because many human resource departments do not collect this information in a systematic manner, age data is frequently estimated. For RNs and LPNs, Iowa Board of Nursing licensure statistics provide a reliable source of age data. At this time, data about nursing assistive personnel (UNLIC) is limited.

TABLE 5. Length of Employment in Years by Position and Setting

N = Number of employees in category
% = Percent of employees in category

	Hospitals		Clinics		Long Term Care Facilities		Assisted Living Facilities		Public Health Home Health		Hospital-Based Home Health	
RN	N	%	N	%	N	%	N	%	N	%	N	%
≤2	335	35%	660	24%	335	35%	68	49%	28	26%	258	17%
3-5	230	24%	528	19%	230	24%	34	24%	24	22%	265	18%
6-10	173	18%	411	15%	173	18%	20	14%	22	20%	257	17%
11-15	96	10%	517	18%	96	10%	10	7%	14	13%	274	18%
≥16	111	12%	696	25%	111	12%	8	6%	21	19%	433	29%
Total	**945**		**2,812**		**945**		**140**		**109**		**1,487**	
LPN	N	%	N	%5	N	%	N	%	N	%	N	%
≤2	286	48%	164	27%	390	38%	58	43%	3	10%	61	28%
3-5	91	15%	130	22%	250	24%	34	25%	2	7%	31	14%
6-10	46	8%	90	15%	166	16%	18	13%	5	17%	20	9%
11-15	52	9%	99	16%	103	10%	13	10%	11	37%	22	10%
≥16	119	20%	123	20%	120	12%	12	9%	9	30%	81	38%
Total	**594**		**606**		**1,029**		**135**		**30**		**215**	
UNLIC	N	%	N	%	N	%	N	%	N	%	N	%
≤2	1,163	56%	525	47%	2,160	51%	510	62%	91	35%	325	43%
3-5	413	20%	254	23%	844	20%	193	23%	31	12%	165	22%
6-10	235	11%	135	12%	556	13%	52	6%	61	24%	104	14%
11-15	131	6%	97	9%	365	9%	33	4%	37	14%	80	11%
≥16	140	7%	99	9%	346	8%	40	5%	37	14%	75	10%
Total	**2,082**		**1,110**		**4,271**		**828**		**257**		**749**	

TABLE 6. Reason for Resignation by Position in all Employment Settings

Employers were asked if they conduct exit interviews with nurses and nursing assistive personnel when a position is vacated. Those who do were asked to identify and rank the reasons cited by the employees for leaving. Categories of reasons are not mutually exclusive.

RN		LPN		UNLIC	
Reason	%	Reason	%	Reason	%
More money	34%	More money	25%	More money	33%
Desired other nursing position	34%	Desired other nursing positions	22%	Relocation	21%
Relocation	21%	Relocation	16%	Better hours	20%
Better hours	19%	Better hours	14%	Job dissatisfaction	19%
Improved benefits	13%	Improved benefits	11%	Desired other nursing position	15%
Job dissatisfaction	10%	Job dissatisfaction	6%	Desired non-nursing position	13%
Retirement	8%	Conflict with management	4%	Improved benefits	11%
Conflict with management	6%	Retirement	3%	Conflict with management	9%
Desired non-nursing position	3%	Desired non-nursing position	3%	Retirement	5%

TABLE 7 Changes Instituted by Employers in 2002 to Improve Recruitment and Retention by Type of Facility and Position

Employers were asked to identify changes that were made in the work setting during the previous year to recruit and retain nurses and nursing assistive personnel. Categories of changes are not mutually exclusive.

	Hospitals		Clinics		Long-term Care Facilities		Assisted Living Facilities		Public Health Home Health		Hospital Based Home Health	
	RN/LPN	UNLIC	RN/LPN	UNLIC	RN/LPN	UNLIC	RN/LPN	UNLIC	RN/LPN	UNLIC	RN/LPN	UNLIC
Increased salary	89%	66%	53%	26%	83%	71%	39%	39%	50%	55%	82%	67%
Increased financial incentives	55%	38%	11%	6%	39%	35%	8%	21%	18%	9%	41%	26%
Increased benefits	32%	26%	9%	2%	15%	14%	16%	16%	9%	14%	15%	15%
Work redesign	36%	30%	21%	11%	23%	25%	7%	16%	9%	9%	22%	11%
Instituted cross training	43%	36%	22%	17%	14%	25%	11%	38%	23%	18%	30%	26%
Changed staff mix	21%	15%	17%	11%	28%	20%	11%	9%	9%	0%	7%	4%
Increased flexibility in work schedules	60%	43%	30%	15%	55%	53%	16%	36%	32%	32%	52%	44%
Improved environmental culture	51%	45%	15%	10%	31%	29%	16%	18%	9%	9%	52%	44%
Restricted patient volume	4%	4%	1%	0%	3%	4%	2%	5%	5%	5%	4%	0%
Conducted staff satisfaction surveys	59%	53%	18%	10%	27%	24%	18%	18%	5%	5%	67%	59%
No changes made	4%	6%	20%	12%	5%	5%	16%	14%	5%	9%	4%	4%

QUALITATIVE DATA

Nearly one-quarter of the respondents provided voluntary comments and feedback on their surveys or in follow-up phone calls. Their comments offer valuable insight from the perspective of the employers of nurses and nursing assistive personnel in Iowa. A detailed list of respondent comments is maintained in the center. A synopsis of qualitative results follows.

Budgeting of Positions
Several employers reported that they do not budget for RN and LPN positions separately. Rather, they post an open position and fill it with either an RN or LPN.

Vacancies
There were a variety of responses to questions on vacancies. Many respondents reported no unfilled positions in 2002 and described workforce stabilization in their area. Of these, some suggested that staff might be influenced to remain in current positions due to a poor economy that limits opportunity for other employment. In contrast, other respondents cited a drain on their existing and potential employee pool caused by active recruitment of nurses away from their communities. More than one respondent identified job opportunities in Rochester, Minnesota that offered fewer hours, better pay, and transportation to the work site.

Temporary Employees
A small number of respondents expressed displeasure with pool (temporary) services that deplete staff and inflate local wages. One respondent referenced legislation passed in Minnesota that limits the fee charged by pool services to 150% of the average local wage, thereby controlling pool-service profit and enabling community-based employers to provide competitive wages.

Reasons for Turnover
Several employers said that nursing assistive employees leave employment to further their formal education and enhance clinical skills. Some respondents said that it is difficult to conduct exit interviews with nursing assistive personnel because many leave without notice. One employer described his/her clinic as a “stopping point” for nurses pursuing sign-on bonuses.

COMPARISON DATA

Vacancies
In 2000 and 2001, the Iowa Council of Nurses projected RN vacancies by setting as follows:

Setting	2000	2001
Hospital	9%	9%
Long Term Care	21%	11%
Home Health/P.H.	10%	3%
Ambulatory Care	12%	12%

In 2002, the number and percent of vacancies (**TABLE 1**) are based on responses by employers and not on projections. The survey return rate was similar each year for most settings. In 2002, the return from hospitals (45%) was significantly lower than in 2000 (94%) and 2001 (86%). In 2002, RN vacancies were lower in all settings with the exception of home health. Similarly, among LPNs and nursing assistive personnel (UNLIC), vacancies decreased between 2000 and 2001, and appeared to stabilize in 2002. This finding is consistent with the qualitative data provided by employers in the 2002 survey.

Wage
Beginning, average and maximum wages per hour increased in all categories between 2001 and 2002 with the exception of maximum wage per hour for UNLIC in ambulatory clinics. Assisted living facilities were not surveyed in 2001. Public health and hospital-based home health agencies' data was combined in 2001.

	Hospitals	Clinics	Long Term Care Facilities	Assisted Living Facilities	Public Health Home Health	Hospital-Based Home Health
RN						
Beginning	+$0.65	+$0.56	+$0.04	N/A in 2001	Not comp.	Not comp.
Average	+$0.83	+$0.46	+$1.23	N/A in 2001	Not comp.	Not comp.
Maximum	+$1.82	+$1.14	+$1.82	N/A in 2001	Not comp.	Not comp.
LPN						
Beginning	+$0.58	+$0.58	+$0.81	N/A in 2001	Not comp.	Not comp.
Average	+$0.66	+$0.49	+$1.45	N/A in 2001	Not comp.	Not comp.
Maximum	+$0.91	+$0.88	+$1.26	N/A in 2001	Not comp.	Not comp.
UNLIC						
Beginning	+$0.37	+$0.19	+$0.34	N/A in 2001	Not comp.	Not comp.
Average	+$0.53	+$0.22	+$0.40	N/A in 2001	Not comp.	Not comp.
Maximum	+$0.50	-$0.68	+$0.78	N/A in 2001	Not comp.	Not comp.

Turnover
Four primary reasons for resignation remained constant between 2001 and 2002: Higher wages, other positions in nursing, relocation and working hours. In 2002, wage was the primary reason cited by employers based on exit interviews.

SUMMARY COMMENTS

The 2002 employer survey results demonstrate that:

- Long-term care facilities exhibit the highest overall percentage of vacancies.
- RNs and LPNs represent the highest percentage of unfilled positions in hospitals and clinics.
- Vacancy rates are greatest for RNs in long-term care facilities and LPNs in non-hospital based home care agencies.
- RN vacancy rates above 7% are found in long-term care facilities and ambulatory clinics.
- LPN vacancy rates above 7% are found in long term care facilities, ambulatory clinics and home health agencies.
- Nursing assistive personnel (UNLIC) vacancy rates above 7% are found in long-term care facilities.
- RN vacancies are greatest in the medical and surgical clinical areas.
- LPN vacancies are greatest in the area of geriatric care.
- Nursing assistive personnel (UNLIC) vacancies are greatest in the medical and surgical areas, and almost as great in the area of geriatric care.
- Wages increased between 2001 and 2002 for RNs, LPNs and nursing assistive personnel.
- For RNs and LPNs, the greatest increase was in the average and maximum wages in long-term care facilities.
- Nursing assistive personnel (UNLIC) had the least wage increase between 2001 and 2002, and was the only group with a decreased wage in any setting.
- The greatest number and percentage of RNs and LPNs employed in any setting are between 40 and 49 years of age.
- The greatest number and percentage of nursing assistive personnel (UNLIC) in hospitals, clinics, long-term care facilities, assistive living facilities and hospital-based home health agencies are 29 years of age or younger. The greatest number and percentage in non-hospital based home health agencies are 50-59 years of age.

- With the exception of clinics and home care, the greatest number and percentage of RNs, LPNs and nursing assistive personnel (UNLIC) were employed in their current position for 2 or fewer years at the time of the survey.

- The primary reason for leaving a position cited on exit interviews of RNs, LPNs and nursing assistive personnel (UNLIC) is related to money. Other frequently cited reasons include desire for another nursing position, relocation and better hours.

- The least cited reason for leaving a position cited by RNs and LPNs is desire for a non-nursing position.

- Most employers instituted changes in the workplace in 2002 to recruit and retain nurses and nursing assistive personnel. Hospitals, long-term care facilities and hospital-based home care programs reported the highest percentage of changes. Clinics and assisted living facilities reported the lowest percentage of changes.

- The majority of hospitals, long-term care facilities and home health agencies increased nursing and nursing assistive personnel wages to improve recruitment and retention.

- Hospitals and long-term care facilities reported the highest percentages of work redesign, changes in staff mix and flexible work schedules.

- A majority of hospital-based home care programs and hospitals conducted staff satisfaction surveys in 2002.

- Restriction of patient volume was the least reported change made to improve recruitment and retention. Fewer that 6% of employers in any setting reported instituting this change.

ACTION PLAN

In 2003, the center will seek new inclusive information about the nursing and nursing assistive workforce, minimize duplication of data collection, and build upon the input of 2002 survey respondents.

The center will collaborate with partner organizations to expedite the collection of inclusive data in selected settings. The Iowa Hospital Association demonstrates a consistently high rate of return for annual surveys that address nursing and nursing assistive personnel vacancies in hospitals. Likewise, the Iowa Department of Workforce Development provides current reliable wage data by category of worker in all employment settings. Both agencies provide ongoing support to the center and will be used as primary sources of vacancy and wage data.

The center Advisory Committee will guide the staff in identifying the purpose, key data elements and methods of future employer surveys. In 2002, long-term care facilities were the only setting exhibiting vacancies greater than 7% for RNs, LPNs and nursing assistive personnel (UNLIC). The Advisory Committee may determine that all facilities in each category should be surveyed on a cyclical basis and select Iowa's approximately 425 long-term care facilities as the first setting for an enhanced survey.

A majority of respondents who contacted the center regarding the survey emphasized that it is difficult and time-consuming to provide inclusive information annually because some items:

- Are not relevant to all employers.
- Are not subject to standardized definitions or formulas.
- Address data elements that employers do not collect, or compile in different ways.
- Duplicate information reported to other agencies.
- Require more time and/or resources to complete than employers deem feasible.

To maximize employer participation in the 2003 survey and increase the reliability of results, the center will explore methods of data collection that drill into selected issues identified by the 2002 survey respondents and successful strategies that promote recruitment and retention. The methods may include the use of focus groups and key interviews in communities throughout Iowa. Topics may be organized around recurring issues identified in the 2002 survey and addressed by employers of nurses and nursing assistive personnel in Iowa hospitals, long-term care facilities, ambulatory clinics, assisted living facilities and home health agencies.

The center recognizes nursing education programs as employment settings for a significant number of registered nurses in Iowa. It will continue to reference findings from Iowa Board of Nursing Annual Nursing Education Program Reports pertaining to age and vacancy data.

The center values and invites the input of employers of nurses and nursing assistive personnel in every setting and every Iowa community. Comments may be directed to Eileen Gloor at egloor@idph.state.ia.us or Jeneane Moody at jmoody@idph.state.ia.us.