

THE FUTURE OF THE HEALTH CARE WORKFORCE IN SOUTH CENTRAL/SOUTHWEST WISCONSIN:

An Analysis of Employer and Employee Surveys in Key Locations

EXECUTIVE SUMMARY

This report provides a detailed picture of the region's health care workforce, offering for the first time representative information from hospitals throughout the South Central/Southwest region (see list of participating hospitals, right).

The data show that registered nurses will continue to play a pivotal role in the health care industry. RNs account for close to half of the workforce in occupations we investigated. The occupation is projected to grow by nearly 300 jobs over the next five years, and 731 RNs are currently aged 55 and over.

While RNs produce the most dramatic numbers and the education and training of the future RN workforce will continue to be important over the next decade, our data indicate that significant numbers of nursing aides and 4-year-degree medical technologists will also be needed in the region in the next five years.

Differences between Madison and more rural institutions are evident, and sometimes surprising. Rural hospitals project higher FTE growth over the next five years. The rural workforce is slightly older, but given the age difference is much less likely to plan to retire in the coming years.

Employees at both rural and urban hospitals expressed interest in a series of options in their lead up to full retirement. Offering more flexible work and scheduling arrangements could help hospitals keep their older employees in the workforce longer. Employees also provided various suggestions for improving job quality and job satisfaction. Considering these suggestions could help health care employers retain more workers who might otherwise leave the field for reasons unrelated to their age.

The information contained in this report is critical for joint efforts involving hospitals and key education and training institutions as the region grapples with slower labor force growth and growing demand in key health care occupations. This information provides the foundation for finding new ways to train the region's health care workforce.

Participating Hospitals

Baraboo – St. Clare Hospital
and Health Services

Beaver Dam Community Hospitals,
Inc.

Boscobel Area Health Center

Columbus Community Hospital

Dodgeville – Upland Hills Hospital

Meriter Hospital

Monroe Clinic and Hospital

Platteville – Southwest Health
Center

Portage – Divine Savior Hospital

Reedsburg Area Medical Center

Richland Hospital

Sauk Prairie Memorial Hospital
and Clinics

St. Mary's Hospital

Stoughton Hospital

University of Wisconsin Hospital
and Clinics

INTRODUCTION

This report provides a detailed picture of the health care workforce in the South Central/Southwest region. The report is unique, drawing on data from both employer and employee responses and using this data to present a comprehensive picture of the age profile of key regional health care occupations, the projected training needs in those occupations, and the reasons that employees expect to leave them.

Throughout the report, we provide data for all participating hospitals but also split that data for urban hospitals (three in Madison) and rural hospitals (12 in the region, see list of all participating hospitals on first page). For key health care occupations (see list below), we provide data on aggregate employment (including both FTE and total headcount), age profile within occupations, and change over the next five years in total employment, as projected by employers. From employee surveys, we show key reasons for leaving occupations and occupations with greatest coming retirements, as projected by staff themselves.

These data will help support individual institutions as they come to understand how their own employee profile mirrors or differs from the region's health care workforce. Perhaps more important than the institutional benchmarking, compiling this data allows a more

Survey Occupations

Cardiovascular technician/ technologist	Medical records/health information technician	Physical therapist assistant
Certified Nurse Specialist	Medical technologist (4-yr degree)	Physician assistant
CT/PET/MRI technician	Medical transcriptionist	Radiation therapist
Dialysis technician	Mental health specialist	Radiography/radiologic technician
Emergency Medical Technician/ paramedic	Nuclear Medicine Technologist	Registered nurse
Home health aide	Nursing aide/assistant/attendant	Registered nurse manager
Licensed practical/vocational nurse	Nurse practitioner	Respiratory therapist
Mammography technician	Occupational therapist	Respiratory therapy assistant/ technician
Medical assistant	Occupational therapist assistant	Social worker/Medical social worker
Medical coder	Pharmacist	Speech therapist
Medical/Clinical lab technician (2-yr degree)	Pharmacy technician/assistant	Surgical technologist
	Phlebotomist	Ultrasound technician
	Physical therapist	

representative regional picture of hospital employment to emerge. That information is critical for joint efforts involving hospitals and key education and training institutions as the region grapples with slower labor force growth and growing demand in key health care occupations. This information provides the foundation for finding new ways to train the region's health care workforce.

BACKGROUND

The Workforce Development Boards of South Central and Southwest Wisconsin and local educational institutions joined forces with area health care employers to conduct a comprehensive assessment of the health care workforce needs in the region. Three Madison-based hospitals and 12 hospitals from the Rural Wisconsin Health Cooperative (RWHC) participated in this comprehensive assessment, administering a Retirement and Departure Intentions Survey to employees of various health care occupations, and simultaneously completing an internal assessment of their future workforce needs.

The two survey instruments used in this study were adapted from those developed by the Fox Valley Health Care Alliance (FVHCA). Parts of this report parallel the structure of the summary report published in May 2007 by FVHCA for the Fox Valley region (see www.fvhca.org for the Fox Valley report).

This report summarizes major findings of the employer and employee surveys administered by participating hospitals. It provides regional results, breaking out urban and rural findings where appropriate. Copies of this report can be accessed at www.cows.org.

SURVEY ADMINISTRATION

Human Resources staff at participating hospitals completed an internal **employer survey**, in which they accounted for current staffing levels in selected occupations. Employers also projected the future workforce needs for these occupations in the next five years. Employer surveys were administered in February and March 2008, and thus reflect staffing levels and projections at this point in time.

The Retirement and Departure Intentions **employee survey** was administered to 11,272 employees (6,703 urban; 4,569 rural) of participating hospitals between early December 2007 and mid-March 2008, resulting in responses from 5,049 employees (3,095 urban; 1,951 rural; three unspecified). Of the 5,049 employees who filled out the survey, 4,808 (2,961 urban; 1,844 rural; three unspecified) did so almost completely. Overall survey response rate (for mostly completed surveys only) was thus 43 percent (44 percent urban; 40 percent rural).

All three Madison-based hospitals, and five rural hospitals, administered their survey to employees of the 36 occupations of interest identified in the employer survey. The remaining seven rural hospitals administered their employee survey to all hospital employees; employees from these hospitals who did not fit into one of the coded 36 occupational categories identified themselves as having an occupation of "other." Due to the difference in survey methodology of the participating hospitals, we eliminated from this analysis all employees who placed themselves into this "other" occupational category: a total of 479 employees. This report analyzes responses only from those 4,329 employees (2,948 urban; 1,378 rural; three unspecified) falling into one of our 36 occupational categories.

The results of this report are organized into three sections. Section 1 presents results from the staffing assessment conducted by employers. Section 2 presents results of the employee survey. Section 3 provides general conclusions from the two surveys.

SECTION I: EMPLOYER SURVEY ANALYSIS

SUMMARY OF OCCUPATIONS

Tables 1, 2, and 3 provide a summary of the staffing assessment survey completed by participating employers for the 36 selected occupations. Table 1 shows the overall regional picture from the survey, providing for all 36 occupations the size of the occupation (total headcount and FTE), the projected five year change in FTE, as well as both the number and percentage of employees over the age of 55 according to the age profile for the occupation. Table 2 provides the data for the three Madison hospitals. Table 3 provides the data for the 12 hospitals in the region outside of Madison.

The occupational data can be ranked in a number of ways. Below we list key occupations according to various ranking systems. The “top five” lists below are all drawn from Table 1, 2, and 3, sorted and ranked by key variables.

OCCUPATIONS WITH HIGHEST TOTAL EMPLOYMENT (TOP FIVE)

<i>Regional</i>	<i>Urban</i>	<i>Rural</i>
Registered nurse	Registered nurse	Registered nurse
Nursing aide/assist/attendant	Nursing aide/assist/attendant	Nursing aide/assist/attendant
Medical technologist (4-yr deg)	Medical technologist (4-yr deg)	Licensed prac/voc nurse
Licensed prac/voc nurse	Pharmacist	Radiography/rad tech
Physical therapist	Physical therapist	Registered nurse manager

Medical technologists, pharmacists, and physical therapists have more employees in urban hospitals. LPNs, radiologic techs, and nurse managers have more employees in rural hospitals. But in both, and throughout the region, RNs and nursing assistants encompass the majority of health care workers. Indeed, of the 10,039 member health care workforce, nearly half (46 percent) are RNs, and another 13 percent are nursing assistants.

OCCUPATIONS WITH HIGHEST PROJECTED FIVE-YEAR GROWTH

Employer respondents were asked to project future workforce needs for the 36 selected occupations, providing estimates of five-year increases or decreases in total FTE employment. These estimates are anticipated total FTE employment levels (not accounting for and independent of their consideration of need for workers due to retirement). From these estimates we are able to identify the occupations that are expected to grow the most over the next five years. [Note: Some employers were unsure about the five-year projected change in FTE employment of certain occupations at their respective institutions and chose not to answer this question. When aggregating across institutions, we assumed the five-year change in these cases to be zero.]

OCCUPATIONS WITH HIGHEST PROJECTED FIVE-YEAR GROWTH (TOTAL FTE GROWTH)

<i>Regional</i>	<i>Urban</i>	<i>Rural</i>
Registered nurse (291)	Registered nurse (233)	Registered nurse (58)
Nursing aide/asst/attendant (51)	Nursing aide/asst/attendant (22)	Nursing aide/asst/attendant (29)
Medical technologist (4-yr deg) (27)	Medical technologist (4-yr deg) (20)	Physical therapist (20)
Physical therapist (24)	Medical assistant (14)	Phlebotomist (10)
Medical assistant (19)	Respiratory therapist (8)	Physical therapist assist (9)

RNs are, by far and not surprisingly, the largest occupational group in the region; our employers project also that their demand for RNs will grow substantially – indeed by 291 – over the next five years. Other occupations projected to exhibit high absolute growth in FTE are nursing assistants (FTE increase of 51), medical technologists (FTE increase of 27), physical therapists (FTE increase of 24), medical assistants (FTE increase of 19), respiratory therapists (FTE increase of 17), and nurse practitioners (FTE increase of 15).

Again, the projected increases are substantial for RNs and nursing assistants both in urban and rural hospitals. The urban demand for RNs is predicted to grow more dramatically than the rural demand. Urban hospitals also project strong growth in their demand for medical technologists, medical assistants, and respiratory therapists. Rural hospitals project more growth in physical therapy, phlebotomy, and physical therapy assistant positions.

OCCUPATIONS WITH HIGHEST PROJECTED FIVE-YEAR GROWTH (PERCENT GROWTH)

<i>Regional</i>	<i>Urban</i>	<i>Rural</i>
Physician assistant (60%)	Physician assistant (85%)	Dialysis technician (133%)
Nurse practitioner (46%)	Nurse practitioner (39%)	Cardio tech (111%)
Physical therapist assist (38%)	Physical therapist assist (21%)	Physical therapist assist (68%)
Home health aide (31%)	Speech therapist (16%)	Physician assistant (55%)
Cardiovascular tech (25%)	Cardiovascular tech (14%)	Occ therapy assist (55%)

The lists above provide “top five” occupations in terms of projected percent growth in FTE employment. These projections in terms of percent growth provide more insight into key occupations that may be growing into more prominence over the next five years. When considering these data, keep in mind that percent growth can seem quite high even when actual growth is very small. Take the 133 percent growth expected for dialysis technicians in rural areas. In fact, taking the projections of all 12 rural hospitals together, the occupation was projected to grow by four FTE positions over the next five years. Given that current employment in the occupation is three, adding four FTE jobs expands the occupation by 133 percent. Low current employment in cardiovascular technicians in rural areas also helps explain the high percentage growth. But for the other occupations, the growth is more significant.

Employers throughout the region project strong increasing demand for physician assistants. Though urban projections slightly exceed rural projections, in both cases the projected growth is substantial. Other occupations expected to experience high percent growth in the next five years include nurse practitioners, physical therapist assistants, home health aides, and cardiovascular technicians.

For urban hospitals, the three occupations expected to experience the highest five-year percent growth are the same as those for the region as a whole: physician assistants, nurse practitioners, and physical therapist assistants. For rural hospitals the top three occupations in terms of projected percent growth are dialysis technicians, cardiovascular technicians, and physical therapist assistants. In terms of the net effect of projections, *rural hospitals projected slightly higher FTE growth over the next five years, with total workforce expected to expand by 11 percent. Urban hospitals projected slightly lower growth overall, expecting workforce expansion in these categories to be about seven percent.*

OCCUPATIONS AND EMPLOYEE AGE PROFILES

A critical question regarding these occupations is the age profile of the current workforce. The more workers that are close to retirement age, the more retirements an occupation will experience. Below, we provide the top five occupations by total number and percentage of workers aged 55 and older.

OCCUPATIONS WITH HIGHEST NUMBER OF EMPLOYEES AGED 55 AND OLDER (TOTAL)

<i>Regional</i>	<i>Urban</i>	<i>Rural</i>
Registered nurse (731)	Registered nurse (503)	Registered nurse (228)
Nursing aide/assist/attend (98)	Medical technologist (4-yr deg) (65)	Nursing aide/assist/attend (59)
Medical technologist (4-yr deg) (97)	Nursing aide/assist/attend (39)	Licensed prac/voc nurse (58)
Licensed prac/voc nurse (94)	Licensed prac/voc nurse (36)	Medical technologist (4-yr deg) (32)
Med transcriptionist (64)	Med transcriptionist (32)	Med transcriptionist (32)

Above we show the top five occupations with the largest number of workers 55 years old or older. Clearly, large occupations are more likely to have workers in the 55 plus age range. Given the occupational predominance of RNs, it comes as no surprise that they lead in the 55 plus age range with 731 RNs at the reporting hospitals in the 55 plus category. That is 16 percent of the RN workforce. RNs in the rural hospitals are slightly more likely to be in the 55 and older category, with 20 percent over 55. Other occupations with a high number of employees aged 55 and older include nursing assistants (98 employees), medical technologists (97 employees), LPNs (94 employees), medical transcriptionists (64 employees), and pharmacists (45 employees).

For urban hospitals, the top occupations in terms of number of employees aged 55 and older are RNs, medical technologists, nursing assistants, and LPNs. For rural hospitals the top occupations are RNs, nursing assistants, LPNs, medical technologists and medical transcriptionists.

OCCUPATIONS WITH HIGHEST PERCENT OF EMPLOYEES AGED 55 AND OLDER (PERCENT OF TOTAL)

<i>Regional</i>	<i>Urban</i>	<i>Rural</i>
Licensed prac/voc nurse (33%)	Licensed prac/voc nurse (47%)	Pharmacist (37%)
Medical technologist (4-yr deg) (32%)	Medical technologist (4-yr deg) (32%)	Med transcriptionist (34%)
Med transcriptionist (29%)	Soc worker/med soc work (26%)	Soc worker/med soc work (33%)
Soc worker/med soc work (29%)	Med transcriptionist (26%)	Medical technologist (4-yr deg) (33%)
Medical coder (25%)	Medical coder (24%)	Med rec/hlth inf tech (33%)

Another way to consider the age profile of these occupations is to look for the occupations with the highest share in the older age cohort. According to our employer survey results, LPNs have the highest proportion of employees aged 55 and older (33 percent). Other occupations with a high proportion of employees aged 55 and older are medical technologists (32 percent), medical transcriptionists (29 percent), social workers (29 percent), medical coders (25 percent), and medical records/health information technicians (24 percent).

For urban hospitals, the occupations with highest percentage of employees aged 55 and older are LPNs, medical technologists, social workers, and medical transcriptionists. For rural hospitals the top four occupations are pharmacists, medical transcriptionists, social workers, and medical technologists.

Overall, the employees at participating rural hospitals are older than those at participating urban hospitals. For all 36 occupations under consideration, the proportion of employees aged 55 and older was 18 percent for rural hospitals, versus 14 percent for urban hospitals.

Table 1

REGIONAL EMPLOYER REPORTED STAFFING LEVELS, 5-YEAR STAFFING PROJECTIONS, AND EMPLOYEES OVER 55 FOR SELECTED OCCUPATIONS

	<i>Total Headcount</i>	<i>Total FTE</i>	<i>Projected 5 yr change in FTE</i>	<i>Employees 55 yrs and older</i>	<i>Employees 55 yrs and older (percent)</i>
Registered nurse	4626	3331	291	731	16%
Nursing aide/assistant/attendant	1259	790	51	98	8%
Medical technologist (4-yr deg)	302	259	27	97	32%
Licensed practical/vocational nurse	288	199	1	94	33%
Physical therapist	266	188	24	27	10%
Radiography/radiologic technician	245	187	9	21	9%
Pharmacist	236	192	9	45	19%
Medical assistant	231	196	19	30	13%
Respiratory therapist	228	169	17	24	11%
Medical transcriptionist	218	180	-10	64	29%
Registered nurse manager	213	201	-1	40	19%
Pharmacy technician/assistant	210	176	-2	13	6%
Phlebotomist	193	133	14	20	10%
Surgical technologist	168	145	15	12	7%
Social worker/Med social worker	140	101	8	40	29%
Occupational therapist	134	71	11	17	13%
Medical coder	129	112	11	32	25%
Medical records/health info tech	126	100	1	30	24%
Medical/Clinical lab tech (2-yr deg)	100	78	6	11	11%
CT/PET/MRI technician	100	83	11	7	7%
Ultrasound technician	68	54	2	5	7%
Certified Nurse Specialist	62	56	3	11	18%
Physical therapist assistant	57	38	14	4	7%
Nurse practitioner	49	33	15	9	18%
Dialysis technician	43	35	7	3	7%
Mammography technician	42	31	4	4	10%
Emergency Med Tech/paramedic	40	23	2	7	18%
Home health aide	36	22	7	4	11%
Occupational therapist assist	36	22	4	1	3%
Cardiovascular tech	35	32	8	0	0%
Speech therapist	34	16	3	3	9%
Mental health specialist	33	22	2	4	12%
Physician assistant	33	20	12	2	6%
Radiation therapist	21	19	1	2	10%
Respiratory therapy assistant/tech	20	14	1	2	10%
Nuclear Medicine Technologist	18	17	1	2	11%
Total	10039	7343	595	1516	15%

Table 2

URBAN EMPLOYER REPORTED STAFFING LEVELS, 5-YEAR STAFFING PROJECTIONS, AND EMPLOYEES OVER 55 FOR SELECTED OCCUPATIONS (RANKED BY TOTAL HEADCOUNT) (3 URBAN HOSPITALS)

	<i>Total Headcount</i>	<i>Total FTE</i>	<i>Projected 5 yr change in FTE</i>	<i>Employees 55 yrs and older</i>	<i>Employees 55 yrs and older (percent)</i>
Registered nurse	3466	2533	233	503	15%
Nursing aide/assistant/attendant	693	442	22	39	6%
Medical technologist (4-yr deg)	205	178	20	65	32%
Pharmacist	187	157	5	27	14%
Physical therapist	168	114	4	21	13%
Respiratory therapist	167	125	8	20	12%
Pharmacy technician/assistant	164	138	-10	8	5%
Medical assistant	156	131	14	17	11%
Radiography/radiologic technician	125	96	2	14	11%
Phlebotomist	124	90	4	11	9%
Medical transcriptionist	123	106	-1	32	26%
Surgical technologist	119	101	7	4	3%
Registered nurse manager	106	102	3	22	21%
Social worker/Med social worker	95	68	5	25	26%
Occupational therapist	95	46	4	12	13%
Medical coder	84	70	2	20	24%
Licensed practical/voc nurse	76	51	-6	36	47%
Medical records/health info tech	74	52	-2	13	18%
CT/PET/MRI technician	68	62	6	7	10%
Certified Nurse Specialist	59	55	3	11	19%
Ultrasound technician	52	41	1	3	6%
Dialysis technician	40	32	3	3	8%
Physical therapist assistant	36	24	5	2	6%
Medical/Clinical lab tech (2-yr deg)	31	27	0	2	6%
Cardiovascular tech	29	28	4	0	0%
Speech therapist	27	12	2	2	7%
Occupational therapist assistant	26	14	-1	0	0%
Mental health specialist	20	11	0	1	5%
Radiation therapist	18	16	0	2	11%
Nurse practitioner	17	16	6	4	24%
Mammography technician	17	15	1	3	18%
Respiratory therapy assistant/tech	14	9	0	1	7%
Nuclear Medicine Technologist	11	10	0	1	9%
Home health aide	6	4	0	0	0%
Physician assistant	4	4	3	0	0%
Total	6702	4982	346	931	14%

Table 3
**RURAL EMPLOYER REPORTED STAFFING LEVELS, 5-YEAR STAFFING PROJECTIONS, AND EMPLOYEES OVER 55 FOR
 SELECTED OCCUPATIONS (RANKED BY TOTAL HEADCOUNT) (12 RURAL HOSPITALS)**

	<i>Total Headcount</i>	<i>Total FTE</i>	<i>Projected 5 yr change in FTE</i>	<i>Employees 55 yrs and older</i>	<i>Employees 55 yrs and older (percent)</i>
Registered nurse	1160	799	58	228	20%
Nursing aide/assistant/attendant	566	347	29	59	10%
Licensed practical/voc nurse	212	147	7	58	27%
Radiography/radiologic tech	120	90	7	7	6%
Registered nurse manager	107	99	-3	18	17%
Physical therapist	98	74	20	6	6%
Medical technologist (4-yr deg)	97	81	7	32	33%
Medical transcriptionist	95	74	-9	32	34%
Medical assistant	75	64	5	13	17%
Med/Clinical lab tech (2-yr deg)	69	51	6	9	13%
Phlebotomist	69	44	10	9	13%
Respiratory therapist	61	44	9	4	7%
Medical records/health info tech	52	48	3	17	33%
Pharmacist	49	35	4	18	37%
Surgical technologist	49	44	8	8	16%
Pharmacy technician/assistant	46	38	9	5	11%
Social worker/Med social worker	45	33	3	15	33%
Medical coder	45	41	9	12	27%
Emergency Med Tech/paramedic	40	23	2	7	18%
Occupational therapist	39	25	7	5	13%
Nurse practitioner	32	17	9	5	16%
CT/PET/MRI technician	32	21	5	0	0%
Home health aide	30	18	7	4	13%
Physician assistant	29	16	9	2	7%
Mammography technician	25	17	3	1	4%
Physical therapist assistant	21	14	9	2	10%
Ultrasound technician	16	13	1	2	13%
Mental health specialist	13	10	2	3	23%
Occupational therapist assistant	10	8	5	1	10%
Nuclear Medicine Technologist	7	7	1	1	14%
Speech therapist	7	4	1	1	14%
Respiratory therapy assist/tech	6	5	1	1	17%
Cardiovascular tech	6	4	4	0	0%
Certified Nurse Specialist	3	1	0	0	0%
Dialysis technician	3	3	4	0	0%
Radiation therapist	3	3	1	0	0%
Total	3337	2361	250	585	18%

CONSIDERING TOTAL EMPLOYMENT VS. FTE DATA. OR, HOW MANY PEOPLE DO YOU NEED TO TRAIN TO MAKE A NURSE ANYWAY?

Many health care employees work part-time. An important feature of this study is that it allows for comparison of total employee headcount with full-time equivalent data reported for each occupation by employers. This data is critical to understanding employment projections and training requirements for future openings. For example, if all pharmacists worked half-time (they don't, see below), then two pharmacists need to be trained for one projected opening.

In Table 4, we provide data on employees per FTE position for each occupation, and for urban and rural areas. Currently, in survey hospitals, 4,626 RNs hold the equivalent of 3,331 full-time RN positions. On average, then, each full-time position requires 1.4 workers. Speech therapists and occupational therapists require the most employees per FTE position. Registered nurse managers, cardiovascular technologists, and nuclear medicine technicians nearly always work full-time.

Across all occupations, rural hospitals (averaging 1.41 workers per FTE) have slightly higher rates of part-time work than urban hospitals (1.35 workers per FTE).

Table 4

REGIONAL, URBAN, AND RURAL TOTAL EMPLOYEES PER FTE, BY OCCUPATION

	<i>Total Employees (headcount)</i>	<i>Total FTE</i>	<i>Employees per FTE</i>	<i>Urban employees per FTE</i>	<i>Rural employees per FTE</i>
Registered nurse	4626	3331	1.39	1.37	1.45
Nursing aide/assistant/attendant	1259	790	1.59	1.57	1.63
Medical technologist (4-yr deg)	302	259	1.17	1.15	1.20
Licensed practical/voc nurse	288	199	1.45	1.48	1.44
Physical therapist	266	188	1.42	1.48	1.33
Radiography/radiologic technician	245	187	1.31	1.30	1.33
Pharmacist	236	192	1.23	1.19	1.42
Medical assistant	231	196	1.18	1.19	1.17
Respiratory therapist	228	169	1.35	1.34	1.38
Medical transcriptionist	218	180	1.21	1.16	1.29
Registered nurse manager	213	201	1.06	1.04	1.08
Pharmacy technician/assistant	210	176	1.19	1.19	1.22
Phlebotomist	193	133	1.45	1.38	1.58
Surgical technologist	168	145	1.16	1.18	1.11
Social worker/Med social worker	140	101	1.38	1.39	1.36
Occupational therapist	134	71	1.89	2.07	1.55
Medical coder	129	112	1.16	1.20	1.09
Medical records/health info tech	126	100	1.26	1.43	1.09
Medical/Clinical lab tech (2-yr deg)	100	78	1.28	1.14	1.35
CT/PET/MRI technician	100	83	1.21	1.11	1.51
Ultrasound technician	68	54	1.26	1.26	1.27
Certified Nurse Specialist	62	56	1.11	1.07	2.73
Physical therapist assistant	57	38	1.49	1.48	1.53
Nurse practitioner	49	33	1.51	1.09	1.88
Dialysis technician	43	35	1.22	1.25	1.00
Mammography technician	42	31	1.34	1.16	1.48
Emergency Med Tech/paramedic	40	23	1.75	N/A	1.75
Home health aide	36	22	1.61	1.50	1.63
Occupational therapist assistant	36	22	1.61	1.85	1.21
Cardiovascular tech	35	32	1.10	1.03	1.67
Speech therapist	34	16	2.08	2.19	1.75
Physician assistant	33	20	1.66	1.13	1.78
Mental health specialist	33	22	1.52	1.77	1.25
Radiation therapist	21	19	1.11	1.10	1.20
Respiratory therapy assistant/tech	20	14	1.47	1.56	1.29
Nuclear Medicine Technologist	18	17	1.06	1.06	1.07
Total	10039	7343	1.37	1.35	1.41

PROJECTED SHORT-TERM WORKFORCE AND TRAINING NEEDS

In Tables 5, 6, and 7, we bring key information together to project five-year hiring expectations based on the age profile, headcount per FTE positions, and projected five-year demand change for each occupation.

These estimates rely on certain assumptions. First, we project that all workers age 60 and older will retire in the coming five years. Of course, some may not retire, and some may retire sooner than 60, but this is the best five-year projection given the available data, and a reasonable one. Second, we use our data on headcount per FTE position in order to project the total number of workers required to fill a certain number of FTE openings.

Taking RNs as an example, employers projected an increase in FTE demand for RNs of 291 FTE. But we know that, on average, each full-time opening will require 1.4 workers. So the 291 openings will require 404 RNs to fill them. Our total projected demand over the next five years adds together the headcount of nurses over 60 – 296 RNs – who will need to be replaced, to the headcount adjusted RNs projected over the five years – 404 RNs to fill projected openings. The process yields a projected demand for 700 new RNs in the region, over the next five years. That’s 700 RNs just to fill the jobs in the 15 participating hospitals.

These estimates can shift quite substantially if headcount per FTE shifts substantially for any occupational category. Obviously, if over the next five years every RN who fills a job worked full-time, then there would be need for substantially fewer nurses. However, the best guess right now would seem to be that incoming RNs will be much like the RNs already employed.

Again, RNs produce the most dramatic numbers, with 700 new workers projected to be required to fill openings. These data also suggest that some 126 new nursing assistants will be needed in the region’s hospitals over the next five years. We also project some 74 jobs for medical technologists with 4-year degrees. For urban hospitals, a projected 21 social workers and 20 medical assistants will be needed in the near-term future, while in rural hospitals there is a projected need for 36 LPNs and 30 physical therapists in the next five years (see “Top Five” lists, below).

In some occupations, the age profile suggests there may be significant hiring, even in the context of projected decline in the occupation. Employment of LPNs, for example, is projected to only grow by two jobs over the next five years. But given a workforce with 36 staff over the age of 60, there will still be significant hiring of LPNs.

OCCUPATIONS WITH HIGHEST ESTIMATED SHORT-TERM WORKFORCE AND TRAINING NEED (TOP FIVE)

<i>Regional</i>	<i>Urban</i>	<i>Rural</i>
Registered nurse (700)	Registered nurse (508)	Registered nurse (191)
Nursing aide/assist/attend (126)	Nursing aide/assist/attend (52)	Nursing aide/assist/attend (74)
Medical technologist (4-yr deg) (74)	Medical technologist (4-yr deg) (51)	Licensed prac/voc nurse (36)
Physical therapist (43)	Soc work/med soc work (21)	Physical therapist (30)
Licensed prac/voc nurse (38)	Medical assistant (20)	Medical technologist (4-yr deg) (22)

Table 5

ESTIMATED REGIONAL SHORT-TERM WORKFORCE AND TRAINING NEED, BY OCCUPATION (ALL PARTICIPATING HOSPITALS)

	<i>Current Headcount 60+</i>	<i>Projected 5 yr change in headcount</i>	<i>Est. workforce need in 5 years (headcount)</i>
Registered nurse	296	404.1	700.1
Nursing aide/assistant/attendant	45	80.5	125.5
Medical technologist (4-yr deg)	42	31.5	73.5
Physical therapist	9	34.0	43.0
Licensed practical/vocational nurse	36	2.0	38.0
Medical assistant	9	22.5	31.5
Social worker/Medical social worker	20	11.1	31.1
Pharmacist	20	10.8	30.8
Respiratory therapist	8	22.5	30.5
Phlebotomist	9	19.5	28.5
Occupational therapist	6	21.1	27.1
Medical coder	14	12.7	26.7
Nurse practitioner	4	22.4	26.4
Physical therapist assistant	1	21.5	22.5
Surgical technologist	5	16.8	21.8
Physician assistant	1	19.9	20.9
Radiography/radiologic technician	8	11.8	19.8
Medical transcriptionist	28	-12.1	15.9
Medical/Clinical lab technician (2-yr deg)	7	7.4	14.4
Medical records/health information technician	13	1.3	14.3
CT/PET/MRI technician	1	12.7	13.7
Home health aide	1	11.3	12.3
Registered nurse manager	11	-0.5	10.5
Cardiovascular tech	0	8.8	8.8
Dialysis technician	0	8.6	8.6
Emergency Medical Technician/paramedic	3	3.5	6.5
Mammography technician	1	5.3	6.3
Speech therapist	1	5.2	6.2
Mental health specialist	3	3.0	6.0
Occupational therapist assistant	0	5.6	5.6
Certified Nurse Specialist	2	2.8	4.8
Ultrasound technician	1	2.5	3.5
Respiratory therapy assistant/technician	1	1.5	2.5
Pharmacy technician/assistant	4	-1.8	2.2
Radiation therapist	1	0.6	1.6
Nuclear Medicine Technologist	0	1.1	1.1
Total	611	813.6	1424.6

Table 6
ESTIMATED URBAN SHORT-TERM WORKFORCE AND TRAINING NEED, BY OCCUPATION (3 URBAN HOSPITALS)

	<i>Current Headcount 60+</i>	<i>Projected 5 yr change in headcount</i>	<i>Est. workforce need in 5 years (headcount)</i>
Registered nurse	189	318.9	507.9
Nursing aide/assistant/attendant	18	33.7	51.7
Medical technologist (4-yr deg)	28	23.1	51.1
Social worker/Medical social worker	14	7.0	21.0
Medical assistant	3	16.6	19.6
Pharmacist	12	5.9	17.9
Respiratory therapist	7	10.7	17.7
Medical transcriptionist	14	-1.2	12.8
Physical therapist	6	5.9	11.9
Occupational therapist	3	8.3	11.3
Registered nurse manager	8	2.6	10.6
Medical coder	8	2.4	10.4
Surgical technologist	1	8.2	9.2
Phlebotomist	3	5.5	8.5
CT/PET/MRI technician	1	6.6	7.6
Nurse practitioner	1	6.6	7.6
Radiography/radiologic technician	5	2.6	7.6
Physical therapist assistant	0	7.4	7.4
Speech therapist	1	4.4	5.4
Certified Nurse Specialist	2	2.7	4.7
Cardiovascular tech	0	4.1	4.1
Dialysis technician	0	3.7	3.7
Physician assistant	0	3.4	3.4
Ultrasound technician	1	1.3	2.3
Licensed practical/vocational nurse	11	-8.9	2.1
Mammography technician	0	1.2	1.2
Medical/Clinical lab technician (2-yr deg)	1	0.0	1.0
Mental health specialist	1	0.0	1.0
Radiation therapist	1	0.0	1.0
Respiratory therapy assistant/technician	1	0.0	1.0
Medical records/health information technician	3	-2.9	0.1
Home health aide	0	0.0	0.0
Nuclear Medicine Technologist	0	0.0	0.0
Occupational therapist assistant	0	-1.8	-1.8
Pharmacy technician/assistant	1	-11.9	-10.9
Total	344	464.8	808.8

Table 7

ESTIMATED RURAL SHORT-TERM WORKFORCE AND TRAINING NEED, BY OCCUPATION (12 RURAL HOSPITALS)

	<i>Current Headcount 60+</i>	<i>Projected 5 yr change in headcount</i>	<i>Est. workforce need in 5 years (headcount)</i>
Registered nurse	107	84.2	191.2
Nursing aide/assistant/attendant	27	47.3	74.3
Licensed practical/vocational nurse	25	10.7	35.7
Physical therapist	3	26.5	29.5
Medical technologist (4-yr deg)	14	8.4	22.4
Phlebotomist	6	15.0	21.0
Nurse practitioner	3	16.8	19.8
Physician assistant	1	16.0	17.0
Medical coder	6	9.8	15.8
Physical therapist assistant	1	14.4	15.4
Occupational therapist	3	11.1	14.1
Medical/Clinical lab technician (2-yr deg)	6	7.8	13.8
Pharmacy technician/assistant	3	10.4	13.4
Medical records/health information technician	10	3.3	13.3
Pharmacist	8	5.3	13.3
Respiratory therapist	1	12.0	13.0
Home health aide	1	11.4	12.4
Radiography/radiologic technician	3	9.3	12.3
Surgical technologist	4	8.3	12.3
Medical assistant	6	5.8	11.8
Social worker/Medical social worker	6	4.1	10.1
CT/PET/MRI technician	0	6.8	6.8
Cardiovascular tech	0	6.7	6.7
Emergency Medical Technician/paramedic	3	3.5	6.5
Mammography technician	1	4.5	5.5
Occupational therapist assistant	0	5.4	5.4
Mental health specialist	2	2.5	4.5
Dialysis technician	0	4.0	4.0
Medical transcriptionist	14	-11.6	2.4
Respiratory therapy assistant/technician	0	1.3	1.3
Ultrasound technician	0	1.3	1.3
Nuclear Medicine Technologist	0	1.1	1.1
Speech therapist	0	0.9	0.9
Radiation therapist	0	0.6	0.6
Certified Nurse Specialist	0	0.0	0.0
Registered nurse manager	3	-3.2	-0.2
Total	267	352.8	619.8

SECTION 2: EMPLOYEE SURVEY ANALYSIS

The Retirement and Departure Survey was administered to all employees who belong to one of the 36 occupational categories identified in the employer survey. In addition to gathering basic demographic and employment information about the respondents, the survey asked questions about retirement and departure plans, and asked for reasons behind any plans to leave the health care field. This section summarizes major findings for the 4,329 respondents from these 36 occupations who completed the survey.

A note on the respondent sample versus employee population

Compared to the employee population to which the survey was sent, our sample population is older overall: a lower proportion of survey respondents are under 45 years of age (50.3% of our sample population is less than 45 years old, compared to 60.4% of the overall population), and a higher proportion are aged 55 and older (18.0% of our sample population is aged 55 or older, compared to 15.1% of the overall population). This could be due in part to younger employees thinking that a “retirement” survey didn’t apply to them when they received the survey from their employer. The difference in age between employee sample and employee population was present for both urban and rural hospitals, although the difference was more pronounced for urban hospitals. **That our sample population is slightly older than the actual population of employees should be taken into account in interpreting the following results, particularly the results regarding retirement intentions. Near-term retirement intentions are likely overstated, since we would expect older people to be more likely to have these plans.**

The breakdown of our sample population by occupation is in line with the occupational breakdown identified in the employer survey. For both our sample respondent population and our overall population, registered nurses, nursing assistants, and medical technologists are the top three occupations in terms of employee headcount. For urban hospitals, these same three occupations are the top three occupations in terms of employee headcount for both respondent sample and employee population. For rural hospitals, registered nurses, nursing assistants, and LPNs are the top three occupations in terms of headcount for both sample and population.

In total, 68 percent of our employee survey respondents were from urban hospitals, versus 32 percent from rural hospitals. This is in line with the overall population of employees to which the survey was sent (67 versus 33 percent urban and rural, respectively).

AGE AND GENDER

As shown in Table 8, one-half of all survey respondents are less than 45 years old. 43 percent of respondents are between 45 and 59 years old, while just 6.7 percent are 60 years or older. 90 percent of respondents are female, and 10 percent are male.

Our rural respondents are slightly older than our urban respondents; 47 percent of rural respondents are under 45 years of age compared to 52 percent of urban respondents, whereas eight percent of rural respondents versus six percent of urban respondents are aged 60 or older.

Table 8
AGE AND GENDER OF SURVEY RESPONDENTS

	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Less than 45 years	2176	50.3	1525	51.8	649	47.1
45 to 49 years	693	16.0	450	15.3	242	17.6
50 to 54 years	680	15.7	451	15.3	229	16.6
55 to 59 years	489	11.3	339	11.5	150	10.9
60 to 64 years	237	5.5	149	5.1	88	6.4
65 years and older	52	1.2	32	1.1	20	1.5
Total	4327	100.0	2946	100.0	1378	100.0
Female	3883	90.1	2643	89.8	1238	90.6
Male	428	9.9	299	10.2	128	9.4
Total	4311	100.0	2942	100.0	1366	100.0

YEARS EMPLOYED

Approximately 23 percent of health care survey respondents had been employed in the field for five years or less, while 38 percent had been employed 21 years or more. Sixty-two percent are employed full-time, while 35 percent work part-time and less than three percent work on a casual basis (see Tables 9 and 10).

A smaller proportion of respondents from rural versus urban hospitals had worked for five years or less (19 versus 24 percent), with a slightly higher percentage of rural workers having worked for six to 20 years. The sample of employees from rural hospitals contained a higher percentage of full-time workers than the sample of employees from our urban sample (70 versus 58 percent).

Table 9
YEARS EMPLOYED AS A HEALTH CARE PROFESSIONAL

	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Less than 1 year	172	4.0	120	4.1	52	3.8
1 to 5 years	805	18.6	594	20.2	210	15.2
6 to 10 years	652	15.1	459	15.6	193	14.0
11 to 15 years	554	12.8	343	11.6	211	15.3
16 to 20 years	496	11.5	310	10.5	185	13.4
21 to 30 years	977	22.6	671	22.8	305	22.1
More than 30 years	671	15.5	449	15.2	222	16.1
Total	4327	100.0	2946	100.0	1378	100.0

Table 10
CURRENT EMPLOYMENT STATUS

	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Full-time	2680	61.9	1719	58.4	959	69.6
Part-time	1532	35.4	1153	39.1	378	27.4
Casual	115	2.7	74	2.5	41	3.0
Total	4327	100.0	2946	100.0	1378	100.0

Table 11
CURRENT EMPLOYMENT SETTING

	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Hospital	3283	75.9	2337	79.3	945	68.6
Clinical (outpatient)	770	17.8	489	16.6	281	20.4
Home health care	73	1.7	35	1.2	38	2.8
Hospice	9	0.2	1	0.0	8	0.6
Assisted living facility	4	0.1	1	0.0	3	0.2
Long-term care	89	2.1	16	0.5	72	5.2
Other	100	2.3	68	2.3	31	2.2
Total	4328	100.0	2947	100.0	1378	100.0

EMPLOYMENT SETTING

As shown in Table 11, more than three-quarters (75.9 percent) of survey respondents from all hospitals are employed in a hospital setting, while 18 percent are employed in a clinical outpatient setting. Respondents from our urban sample were more likely to work in a hospital setting compared to their rural counterparts (79 versus 69 percent) and less likely to work in a clinical outpatient setting (16.6 versus 20 percent). Five percent of respondents from our rural hospitals work in long-term care, compared to only 0.5 percent of urban respondents.

OCCUPATION

A break-down of survey respondents by occupation is provided in Table 12. Over 45 percent of all respondents are registered nurses. Over six percent are nursing assistants; medical technologists comprise approximately four percent; and medical assistants and pharmacists each comprise approximately three percent of the regional respondent population. These same five occupations top the list for our sample of urban respondents. Registered nurses, nursing assistants, medical technologists and medical assistants are likewise well-represented in our rural sample (comprising 35, six, five, and four percent of all rural respondents, respectively). However, while pharmacists do not make up a significant portion of rural respondents (less than two percent), LPNs and registered nurse managers do (over five percent each).

Table 12
EMPLOYEE SURVEY RESPONDENTS, GROUPED BY OCCUPATION

	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Registered nurse	2003	46.3	1521	51.6	481	34.9
Nursing aide/assist/attend	277	6.4	194	6.6	83	6.0
Medical technologist (4-yr deg)	185	4.3	119	4.0	66	4.8
Medical assistant	146	3.4	86	2.9	60	4.4
Pharmacist	143	3.3	117	4.0	26	1.9
Licensed prac/voc nurse	123	2.8	48	1.6	75	5.4
Registered nurse manager	120	2.8	46	1.6	74	5.4
Physical therapist	118	2.7	77	2.6	41	3.0
Radiography/radiologic tech	117	2.7	61	2.1	56	4.1
Respiratory therapist	112	2.6	80	2.7	32	2.3
Medical transcriptionist	98	2.3	59	2.0	39	2.8
Soc worker/Med soc worker	81	1.9	51	1.7	29	2.1
Pharmacy tech/assist	78	1.8	54	1.8	24	1.7
Medical coder	74	1.7	42	1.4	32	2.3
Med rec/hlth info tech	68	1.6	26	0.9	42	3.0
Phlebotomist	67	1.5	44	1.5	23	1.7
Surgical technologist	62	1.4	56	1.9	6	0.4
Certified Nurse Specialist	58	1.3	42	1.4	16	1.2
Occupational therapist	58	1.3	36	1.2	22	1.6
Med/clinical lab tech (2-yr deg)	50	1.2	21	0.7	29	2.1
Nurse practitioner	49	1.1	27	0.9	22	1.6
Ultrasound technician	39	0.9	29	1.0	10	0.7
CT/PET/MRI technician	37	0.9	28	0.9	9	0.7
Physical therapist assist	24	0.6	12	0.4	12	0.9
Emer Med Tech/paramedic	20	0.5	N/A	N/A	19	1.4
Physician assistant	16	0.4	3	0.1	13	0.9
Dialysis technician	14	0.3	13	0.4	1	0.1
Mammography technician	14	0.3	7	0.2	7	0.5
Occupational therapist assist	14	0.3	5	0.2	9	0.7
Cardiovascular tech	13	0.3	11	0.4	2	0.1
Radiation therapist	13	0.3	11	0.4	2	0.1
Speech therapist	13	0.3	9	0.3	4	0.3
Home health aide	7	0.2	1	0.0	6	0.4
Nuclear medicine tech	7	0.2	4	0.1	3	0.2
Respiratory therapy assist	6	0.1	5	0.2	1	0.1
Mental health specialist	5	0.1	3	0.1	2	0.1
Total	4329	100.0	2948	100.0	1378	100.0

RETIREMENT INTENTIONS

Nearly 12 percent of respondents plan to retire within the next five years (see Table 13). An additional 14 percent plan to retire in six to 10 years. At the other end of the spectrum, 42 percent of workers don't plan to retire for more than 20 years. As would be expected, the older cohorts of health care workers are much more likely to plan on retirement within the next five years.

As we saw in Table 8, our rural respondents are slightly older than our urban respondents. It is therefore surprising that a slightly lower proportion of them are planning on retirement in the next five years compared to our urban respondents (9.7 versus 12.4 percent).

Taking a closer look at Table 14, rural respondents falling into each of our categories between 45 and 64 years old are considerably less likely than their urban counterparts to be planning on retirement within five years.

Table 15 ranks occupations by the proportion of employees planning to retire within five years. Medical technologists, nurse practitioners, social workers, and LPNs are the four occupations with the highest proportion of employees planning to retire within five years. For our urban hospitals these top four occupations are LPNs, nuclear medicine technologists, medical records technicians, and medical technologists. For our rural hospitals, the top four occupations are certified nurse specialists, physical therapist assistants, occupational therapist assistants, and social workers. [Note: small sample size of some occupations must be considered when interpreting these results.]

Table 13

RETIREMENT INTENTIONS OF HEALTH CARE EMPLOYEES

<i>Planning to retire in:</i>	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Less than 1 year	64	1.5	49	1.7	15	1.1
1 to 5 years	433	10.0	314	10.7	119	8.6
6 to 10 years	616	14.2	416	14.1	200	14.5
11 to 15 years	678	15.7	451	15.3	227	16.5
16 to 20 years	702	16.2	466	15.8	234	17.0
21 to 30 years	1,021	23.6	670	22.7	350	25.4
More than 30 years	815	18.8	582	19.7	233	16.9
Total	4329	100.0	2948	100.0	1378	100.0

Table 14

EMPLOYEES PLANNING TO RETIRE WITHIN FIVE YEARS, BY AGE

<i>Age</i>	All Hospitals	Urban	Rural
	<i>Planning to retire within 5 years</i>	<i>Planning to retire within 5 years</i>	<i>Planning to retire within 5 years</i>
Less than 45 years	1.1% (25 of 2176)	1.0% (16 of 1525)	1.4% (9 of 649)
45 to 49 years	2.0% (14 of 693)	2.4% (11 of 450)	1.2% (3 of 242)
50 to 54 years	8.2% (56 of 680)	9.5% (43 of 451)	5.7% (13 of 229)
55 to 59 years	37.6% (184 of 489)	43.7% (148 of 339)	24.0% (36 of 150)
60 to 64 years	73.8% (175 of 237)	79.2% (118 of 149)	64.8% (57 of 88)
65 years and older	80.8% (42 of 52)	81.2% (26 of 32)	80.0% (16 of 20)
Total	11.5% (496 of 4327)	12.3% (362 of 2946)	9.7% (134 of 1378)

Table 15

OCCUPATIONS RANKED BY SHARE OF EMPLOYEES PLANNING TO RETIRE WITHIN FIVE YEARS

ALL HOSPITALS

	<i>Planning to retire within 5 years:</i>	
Medical technologist (4-yr deg)	21.6%	(40 of 185)
Nurse practitioner	20.4%	(10 of 49)
Social worker/Medical social worker	19.8%	(16 of 81)
Licensed practical/vocational nurse	17.1%	(21 of 123)
Respiratory therapy assistant	16.7%	(1 of 6)
Medical records/health information technician	16.2%	(11 of 68)
Certified Nurse Specialist	15.5%	(9 of 58)
Radiation therapist	15.4%	(2 of 13)
Home health aide	14.3%	(1 of 7)
Nuclear medicine technologist	14.3%	(1 of 7)
Occupational therapist assistant	14.3%	(2 of 14)
CT/PET/MRI technician	13.5%	(5 of 37)
Phlebotomist	13.4%	(9 of 67)
Physical therapist assistant	12.5%	(3 of 24)
Registered nurse	12.5%	(250 of 2003)
Medical coder	12.2%	(9 of 74)
Registered nurse manager	11.7%	(14 of 120)
Medical assistant	10.3%	(15 of 146)
Emergency Medical Technician/paramedic	10.0%	(2 of 20)
Radiography/radiologic technician	9.4%	(11 of 117)
Physical therapist	9.3%	(11 of 118)
Medical transcriptionist	8.2%	(8 of 98)
Cardiovascular tech	7.7%	(1 of 13)
Pharmacist	7.7%	(11 of 143)
Dialysis technician	7.1%	(1 of 14)
Mammography technician	7.1%	(1 of 14)
Physician assistant	6.2%	(1 of 16)
Respiratory therapist	6.2%	(7 of 112)
Medical/clinical lab technician (2-year deg)	6.0%	(3 of 50)
Occupational therapist	5.2%	(3 of 58)
Nursing aide/assistant/attendant	4.7%	(13 of 277)
Pharmacy technician/assistant	3.8%	(3 of 78)
Ultrasound technician	2.6%	(1 of 39)
Surgical technologist	1.6%	(1 of 62)
Total	11.5%	(497 of 4,329)

Table 15 (continued)

OCCUPATIONS RANKED BY SHARE OF EMPLOYEES PLANNING TO RETIRE WITHIN FIVE YEARS

URBAN HOSPITALS

	<i>Planning to retire within 5 years:</i>	
Licensed practical/vocational nurse	31.2%	(15 of 48)
Nuclear medicine technologist	25.0%	(1 of 4)
Medical records/health information technician	23.1%	(6 of 26)
Medical technologist (4-yr deg)	22.7%	(27 of 119)
Nurse practitioner	22.2%	(6 of 27)
Respiratory therapy assistant	20.0%	(1 of 5)
Social worker/Medical social worker	19.6%	(10 of 51)
Radiation therapist	18.2%	(2 of 11)
Medical coder	16.7%	(7 of 42)
Radiography/radiologic technician	16.4%	(10 of 61)
Phlebotomist	15.9%	(7 of 44)
CT/PET/MRI technician	14.3%	(4 of 28)
Mammography technician	14.3%	(1 of 7)
Registered nurse	13.2%	(201 of 1521)
Physical therapist	13.0%	(10 of 77)
Registered nurse manager	13.0%	(6 of 46)
Medical assistant	10.5%	(9 of 86)
Medical/clinical lab technician (2-year deg)	9.5%	(2 of 21)
Cardiovascular tech	9.1%	(1 of 11)
Dialysis technician	7.7%	(1 of 13)
Pharmacist	7.7%	(9 of 117)
Certified Nurse Specialist	7.1%	(3 of 42)
Medical transcriptionist	6.8%	(4 of 59)
Respiratory therapist	6.2%	(5 of 80)
Occupational therapist	5.6%	(2 of 36)
Pharmacy technician/assistant	5.6%	(3 of 54)
Nursing aide/assistant/attendant	4.1%	(8 of 194)
Ultrasound technician	3.4%	(1 of 29)
Surgical technologist	1.8%	(1 of 56)
Total	12.3%	(363 of 2948)

Note: Small sample size of some occupations should be taken into account when interpreting these results.

Table 15 (continued)

OCCUPATIONS RANKED BY SHARE OF EMPLOYEES PLANNING TO RETIRE WITHIN FIVE YEARS

RURAL HOSPITALS

	<i>Planning to retire within 5 years:</i>	
Certified Nurse Specialist	37.5%	(6 of 16)
Physical therapist assistant	25.0%	(3 of 12)
Occupational therapist assistant	22.2%	(2 of 9)
Social worker/Medical social worker	20.7%	(6 of 29)
Medical technologist (4-yr deg)	19.7%	(13 of 66)
Nurse practitioner	18.2%	(4 of 22)
Home health aide	16.7%	(1 of 6)
Medical records/health information technician	11.9%	(5 of 42)
CT/PET/MRI technician	11.1%	(1 of 9)
Registered nurse manager	10.8%	(8 of 74)
Emergency medical technician/paramedic	10.5%	(2 of 19)
Medical transcriptionist	10.3%	(4 of 39)
Registered nurse	10.2%	(49 of 481)
Medical assistant	10.0%	(6 of 60)
Phlebotomist	8.7%	(2 of 23)
Licensed practical/vocational nurse	8.0%	(6 of 75)
Pharmacist	7.7%	(2 of 26)
Physician assistant	7.7%	(1 of 13)
Medical coder	6.2%	(2 of 32)
Respiratory therapist	6.2%	(2 of 32)
Nursing aide/assistant/attendant	6.0%	(5 of 83)
Occupational therapist	4.5%	(1 of 22)
Medical/clinical lab technician (2-year deg)	3.4%	(1 of 29)
Physical therapist	2.4%	(1 of 41)
Radiography/radiologic technician	1.8%	(1 of 56)
Total	9.7%	(134 of 1378)

Note: Small sample size of some occupations should be taken into account when interpreting these results.

FACTORS INFLUENCING RETIREMENT DECISIONS

Respondents were asked to choose the single most important factor driving their retirement decision. These are ranked in Table 16. The most frequently cited factor was job stress/pressure (17.5 percent). Other top reasons were reaching appropriate retirement age (12.1 percent), desire to pursue leisure activities (10.5 percent), reaching eligible retirement age (9.9 percent), and physical demands of the job (6.9 percent). For both rural and urban hospitals, the top reasons for retirement were reaching eligible or appropriate retirement age and job stress/pressure.

For the three occupations with the highest number of employees planning to retire within five years—registered nurses, medical technologists, and LPNs (see Table 14)—the most commonly-cited top factor driving the retirement decision of these individuals was job stress/pressure.

Table 16

MOST IMPORTANT REASON FOR RETIRING FROM HEALTH CARE PROFESSION

	All Hospitals		Urban		Rural	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Job stress/pressure	87	18	63	17	24	18
Reaching appropriate retirement age	60	12	43	12	17	13
Desire to pursue leisure activities	52	11	38	11	14	10
Reaching eligible retirement age	49	10	25	7	24	18
Physical demands of job	34	7	27	8	7	5
Financial security at time of retirement	29	6	26	7	3	2
Coincide with spouse's/partner's retirement	28	6	20	6	8	6
Emotional demands of job	25	5	15	4	10	8
Health related issues	22	4	17	5	5	4
Work schedules/shift	20	4	17	5	3	2
Changing priorities in the health care system	18	4	15	4	3	2
Other	15	3	13	4	2	2
Lifestyle change	14	3	11	3	3	2
Desire for a career change	12	2	9	3	3	2
Family obligations	9	2	7	2	2	2
Insufficient salary and benefits	9	2	5	1	4	3
Access to post employment benefits	7	1	5	1	2	2
Lack of interesting work	4	1	4	1	N/A	N/A
Number of dependants at home	2	0.4	2	1	N/A	N/A
Total	496	100	362	100	134	100

MANAGING RETIREMENT DECISIONS

Respondents were asked if they would be interested in specified options for their lead up to full retirement (Table 17). Of individuals planning to retire within the next five years, 64 percent are interested in contract or casual employment after retirement, while 43 percent are interested in a gradual reduction in hours leading up to retirement, and 28 percent are interested in a reduced level of responsibility prior to retirement. Interest in these various options is roughly similar between urban and rural hospital employees.

Table 17

EMPLOYEE INTEREST IN VARIOUS OPTIONS LEADING UP TO RETIREMENT

<i>Interested In:</i>	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Gradual reduction in hours leading up to retirement	213	43%	150	41%	63	47%
Reduced level of responsibility prior to retirement	137	28%	106	29%	31	23%
Contract or casual employment after retirement	318	64%	237	65%	81	60%

SUGGESTIONS FOR RETAINING HEALTH CARE WORKERS

Survey respondents provided various suggestions for retaining health care workers. Suggestions fall within two broad categories—those that address ways to improve job quality at the workplace and those that offer means to elevate job satisfaction.

With regard to job quality, many respondents noted that implementing better staffing would serve to retain health care workers; lowering caseloads may serve also to decrease job stress/pressure experienced by many health care workers who participated in the survey. Health care workers also frequently mentioned that the creation and/or maintenance of a supportive working environment, where they feel respected, appreciated, and listened to by supervisors and management, would likely retain employees. Paperwork and other recordkeeping was identified as an onerous activity that oftentimes kept workers from providing the care desired—decreasing the need (or frequency) for excessive paperwork might maintain health care workers in the field. Lastly, respondents indicated that provision of flexible scheduling by their workplace would improve job quality.

Not surprisingly, most workers commented that they would like better wages and benefits; better benefits encompassed better health insurance (i.e., health care insurance that is not only more comprehensive, but that is also more affordable to employees), better retirement benefits (i.e., provision of health insurance *after* retirement), greater contributions by employers to employee 401k plans, and finally, improvements to vacation time/EMB/PTO banks, their allocation and use. Employees stated that recognition of longevity by their employer through financial rewards and more on-the-job privileges, like schedule choice, would help to retain them. This suggestion in particular seems understandable given that the overall sample population is older than the overall population; many of the respondents have likely been working in health care for some time and want a reward for their contribution and dedication to the field.

While the health care workers of both urban and rural hospitals frequently put forth the above suggestions, they offered suggestions particular to their location. For urban hospitals, the suggestion to provide free or paid parking was oftentimes mentioned. Rural hospitals voiced the need for continuing educational opportunities as a way to maintain the health care workforce.

DEPARTURE INTENTIONS

In addition to questions regarding retirement plans, employees were asked if they intended to depart the health care field within 24 months for reasons unrelated to retirement. Less than two percent of survey respondents, who do not plan to retire in the next five years, plan to leave the health care field within the next 24 months (see Table 18). Job stress/pressure and insufficient salary and benefits were the top two reasons behind people's decision to depart, followed by desire for a career change, family obligations, and dissatisfaction with their work schedule or shift (Table 19).

Table 18

DEPARTURE INTENTIONS OF HEALTH CARE EMPLOYEES NOT PLANNING TO RETIRE WITHIN FIVE YEARS

	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Yes, I plan to leave within 12 months	20	0.5	11	0.4	9	0.7
Yes, I plan to leave within 12 and 24 months	55	1.4	35	1.4	20	1.6
No	3757	98	2539	98.2	1215	97.7
Total	3832	100	2585	100	1244	100

Table 19

MOST IMPORTANT REASON FOR DEPARTING FROM HEALTH CARE PROFESSION

	All Hospitals		Urban		Rural	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Insufficient salary and benefits	14	19	4	9	10	33
Job stress/pressure	14	19	9	21	5	17
Other	12	16	7	16	5	17
Desire for a career change	6	8	3	7	3	10
Family obligations	6	8	2	5	4	13
Work schedules/shift	6	8	5	11	1	3
Returning to school	5	7	4	9	1	3
Changing priorities in the health care system	3	4	3	7	N/A	N/A
Lack of interesting work	2	3	2	5	N/A	N/A
Lifestyle change	2	3	1	2	1	3
Desire to pursue leisure activities	1	1	1	2	N/A	N/A
Emotional demands of job	1	1	1	2	N/A	N/A
Health related issues	1	1	1	2	N/A	N/A
Physical demands of job	1	1	1	2	N/A	N/A
Total	74	100	44	100	30	100

SECTION 3: CONCLUSIONS

In this report, we have attempted to synthesize the very rich data on the regional health care workforce provided by the employer and employee surveys which were administered in winter 2007-08. This report provides a snapshot of the current workforce and some indication of the ways in which that workforce will change as the result of retirement decisions of current employees and the future staffing needs of employers. The results of this report also reveal that though urban and rural hospitals are different, in many respects, they share striking similarities.

Clearly and consistently, our report shows that RN is the predominant occupation, even the backbone of these employers, in both urban and rural settings. RNs account for 46 percent of the workforce in occupations we investigated; the occupation is projected to grow by 291 jobs over the next five years; some 731 RNs are currently aged 55 and over. Presently, RNs commonly work less than full-time hours; on average 1.4 workers fill one FTE RN position. Though the severe occupational shortage of RNs of a few years ago has faded substantially, it is obvious from this data that RNs will continue to play a pivotal role in the health care industry, and that education and training of the future RN workforce will continue to be important over the next decade.

While RNs produce the most dramatic numbers—with more than 700 new workers projected to be needed in the next five years by our participating health care institutions—our data indicate that 125 nursing assistants, and 73 4-year-degree medical technologists, will also be needed in the region in that same time period.

Differences between Madison and more rural institutions are evident, and sometimes surprising. Rural hospitals project higher FTE growth over the next five years, with total workforce expected to expand by 11 percent, versus seven percent for urban hospitals. Across all occupations, rural hospitals also have slightly higher rates of part-time work than urban hospitals. The rural workforce is slightly older, but given the age difference is much less likely to plan to retire in the coming years.

Employees at both rural and urban hospitals expressed interest in a series of options in their lead up to full retirement. A majority of those planning to retire within the next five years is interested in contract or casual employment after retirement, while a significant percentage is also interested in a gradual reduction in hours leading up to retirement. Offering these types of flexible work and scheduling arrangements is one strategy hospitals can pursue to keep their older employees in the workforce longer, where they can draw on their years of experience to mentor younger workers.

Age of employees is an obvious and important factor to consider when projecting for future workforce needs. However, it is equally critical to evaluate the reasons workers are planning to retire that are not necessarily tied to proximity to retirement age. For the three occupations in our survey with the highest number of employees planning to retire within five years—RNs, medical technologists, and LPNs—the most commonly-cited top factor driving the retirement decision was job stress and/or job pressure, not proximity to retirement age.

Employees provided various suggestions for improving job quality and job satisfaction, from implementing improved staffing to providing continuing educational opportunities for staff. Although not all suggestions offered by employees may be possible, considering their suggestions can help health care employers retain more workers who might otherwise leave the field for reasons unrelated to their age.

The picture we have drawn is complex and incomplete. We know that both employer and employee respondents, as well as leading education and workforce development institutions, will help develop and refine the analysis of these data. This report, then, does not offer an easy conclusion. Rather, with this report, we hope to provide data for the continuing dialogue on the region's health care workforce, and for initiatives that can help the region's health care workforce and industry grow over the coming years. Perhaps more than anything, this report demonstrates the importance of developing a regional picture of the health care workforce. The needs of the future, and the ways that educators and employers will need to work together to build the health care workforce, are only evident when a more complete picture is drawn.

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