

**Center for Health Workforce Planning
Bureau of Health Care Access
Iowa Department of Public Health**

**A Report Prioritizing a Potential Shortage
of Licensed Health Care Professionals in Iowa**

May 2005

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Background

The National Center for Health Workforce and Analysis calls for states to track and report workforce data. Necessary information includes the supply, demand, distribution, education and utilization of its workers. Such information assists state planners, policy makers, educators, and interested others to address issues relating to health workforce.¹ As part of this effort, the Iowa Department of Public Health, through the Center for Health Workforce Planning, undertook a study to identify and prioritize potential shortages of licensed health care professionals in Iowa.

Prior to this study, age analyses of professional nurses, nursing home administrators, and dietitians had been included as part of an in-depth study of those professions.^{2,3,4} The studies were conducted at the request of the respective licensure boards in order to determine if there were workforce shortages in the professions. The boards were acting on nationally publicized information about nursing shortages and anecdotal information pertaining to shortages in Iowa that involved the latter two professions. After review, it was not possible to state definitively that there was or was not a shortage in any of the groups primarily because the term “shortage” was not defined. The studies did, however, engender recommendations that each licensed health profession collect a minimum data set of employment information to assist future researchers in making such a determination. Because the recommendations are futuristic, it was determined that additional efforts to pinpoint potential shortages of Iowa’s health care workforce should be undertaken now.

The present study was based on information provided by the U.S. Bureau of Labor Statistics (BLS) Employment Projections 2002-2012.⁵ BLS does not make predictions about labor shortages but provides data that can be used in a variety of ways to study the problem. One of the most common uses of BLS data is to anticipate a “coming shortage” by studying the difference between the projected labor force level and the projected employment count. Researchers who use these projections need to understand that there are substantial statistical dissimilarities between the two sets of data so the face value of the differences is skewed.

Another way that the BLS data are used to study workforce shortages is to investigate trends in each occupation. One significant indicator is a consistent pattern of rising wages and rising employment, suggesting that the demand for workers in that occupation is increasing faster than the supply.⁶ Again, conclusions must be carefully drawn. The persistent existence of vacancies despite rising wages may represent a true shortage or simply a market that is maintaining equilibrium by paying higher wages.

A third use of the BLS projections is to compare state and national percentages of an occupation that is age 55 and older. Workers in this group are theoretically ready to retire over the next decade. A higher than average percentage signals a potential shortage. This type of determination formed the basis of the present study.

Method

The birth dates of 80,579 active Iowa licensees, representing twenty-four major health occupations, were categorized. Non-licensed health care workers were not included in this study due to the lack of accurate and comprehensive data. The results are shown as appendices A through X. Information was provided by the Bureau of Professional Licensure (BPS), the University of Iowa’s Office of Statewide Clinical Education Programs (OSCEP), the Board of Nursing, Board of Medical Examiners, Board of Dental Examiners, Bureau of Emergency Medical Services (BEMS), and Iowa Workforce Development. The source and date that information was obtained are shown in each appendix as well as some background comparative information. It should be noted that only those licenses designated as “active” were included in the study. In any profession, there are many more individuals licensed under additional categories. Also, in some professions, there are individuals who practice a profession but who are exempt from licensure by state statues. Information provided by OSCEP includes only licensees who had active licenses and were currently employed in the state of Iowa. Licensure boards do not gather similar employment data.

The first page of each appendix shows selected factors that impact a profession and the age of its licensees. It also provides a graph of the number of licensees in each decade. This depiction is an easy way to see the age trend of the profession. The second page shows the number of licensees born each year and their age in 2005. The number and percentage of those who are age 55 and over are shown as the first subtotal. The remaining age groups are shown as a second subtotal. Both subgroups comprise the grand total. Professions where 20 percent or more of licensees are age 55 and older are described in the findings. This percentage was chosen because it is significantly greater than the 13.9 percent national figure for all occupations.

Findings

Of the twenty-four health professions studied, fifteen (63%) project more than 20 percent of their licensees to be age 55 and older in 2005. Table 1 shows a summary of the findings.

Table 1: Selected Iowa Health Professions & Percentage of Licensees Age 55 & Older

Profession	Percentage Age 55 & Older	Number Age 55 & Older	Total Active Licensees
Psychologists	47%	215	460
Health Service Providers ^{Note 1}	45%	130	291
Marital & Family Therapists	38%	56	148
Nursing Home Administrators	38%	256	666
Mental Health Physicians	35%	113	322
Mental Health Counselors	34%	170	498
Dentists	34%	527	1,560
Social Workers	28%	1,192	4,331
Advanced Nurse Practitioners	24%	295	1,219
Physicians	23%	554	2,407
Registered Nurses	23%	8,040	34,666
Chiropractors	22%	296	1,354
Licensed Practical Nurses	22%	2,058	9,208

Optometrists	22%	125	571
Pharmacists	22%	547	2,529
Dietitians	18%	148	823
Podiatrists	18%	51	291
Audiologists	16%	38	242
Speech Pathologists	15%	109	709
Respiratory Care Practitioners	13%	166	1,246
Emergency Medical Services	11%	1,346	12,685
Physician Assistants	11%	72	673
Physical Therapists	9%	234	2,484
Occupational Therapists	6%	67	1,197
Total	21% (average)	16,805	80,579

Psychologists (47%) and health service providers (45%) had the greatest percentage of licensees age 55 and older followed by marital and family counselors and nursing home administrators (38 % each). Mental health physicians (35%) and mental health counselors and dentists (34% each) complete the professions where over 30 percent of active licensees are age 55 and older. Other groups with between 20 and 30 percent include social workers (28%), advanced practice nurses (24%), physicians and registered nurses (23% each), licensed practical nurses, chiropractors, opticians, and pharmacists (22% each). In professions where there is more than one category of licensee, such as the physicians and dentists, the percentage was calculated using the total of all the categories.

METHODOLOGICAL LIMITATIONS OF THE STUDY

Conclusions from this study are limited by some methodological issues. First, several different sources provided data. Each may use different parameters for data gathering and reporting. For example, licensure boards may define active licensure in a different manner. Additionally, information provided by OSCEP included individuals who were actively licensed as well as currently employed in the state of Iowa. Licensure boards do not gather similar employment data so their information included only those with active licenses. Second, data were obtained and reported at different times. Most information was downloaded over approximately a one-month period rather than being recorded on a single day. Licensure boards report “rolling numbers” meaning that their data is constantly updated and changes continuously. Another time variable was that most boards require licensure renewal every two years, so some data may have been updated recently while other information was two years old. Third, there is variance within the data set of licensees age 75 and older who maintain active licensure although they may no longer be employed. This factor impacts the percentage of those that are ages 55 and older especially when numbers in a profession are small. Finally, there are differences due to the requirements of the profession. The date a profession first required licensure impacts the age of its licensees. For example, licensure for respiratory care therapists and social workers only became mandatory in 1996. Prior to that time, these professions had voluntary licensure but the data sets are impacted by the mandatory requirement. Educational requirements also impact the age at which licensees enter a profession. Those professions requiring terminal professional degrees have fewer members younger than 30 because of the time it takes to attain the requisite degree. These variables can be examined for each profession by viewing the detail provided in the appendices.

Conclusions and Recommendations

Despite methodological limitations, there are some general conclusions that can be drawn. First, those professions serving the mental health needs of Iowans have the highest combined percentage of licensees age 55 and older and are, therefore, at greatest risk of having a shortage of workers. Psychologists and health service providers are at highest risk using the sole criteria of age. If the current trend is not reversed, their services can be expected to decline substantially after the next decade. This comes at a time when access to mental health services is already declining.⁷

Second, there are fewer individuals entering at least ten licensed professions. There are fewer 30 – 40 year olds in the majority of the professions than there are in the 40 – 50 year age group and frequently there are fewer in the 40 – 50 age group compared to the 50 – 60 age group. Such declines will impact the future ability of these professions to provide adequate services to an aging Iowa population whose demand for services will be increasing. Dentists, dietitians, emergency medical technicians, health service providers, licensed practical nurses, marital and family therapists, nursing home administrators, psychologists, registered nurses, and respiratory care therapists, are representative professions.

Third, all but five of Iowa's health care occupations exceed the national average of workers who are age 55 and older. The national percentage is 13.9 percent and reflects all types of occupations. Only respiratory care practitioners, emergency medical technicians, physician assistants, physical therapists, and occupational therapists have percentages below the national average. There is increased risk for shortages in all other professions.

Many intangible factors besides supply and demand data contribute to determining a workforce shortage. "The size and characteristics of the future health workforce are determined by a complex integration of the health care operating environment, economic factors, technology, regulatory and legislative actions, epidemiological factors, the health care education system and demographics. Efforts over the past several decades to model the supply of and demand for health workers show there is a lack of consensus on the relationship between the health workforce and its determinants, the future values of many of these determinants, and forecasters' assumptions."⁸ Horrigan⁶ concludes that "perhaps the best that can be done is to examine as many of these indicators as possible and develop a profile of how the labor market is responding to the changes in each occupation's relative demand for, and supply of, workers" (p.15).

Studying the number of individuals in a profession age 55 and over is but one sign of an impending shortage. Despite some inconsistencies in licensure information, current birthdates are one tangible indicator of who is likely to be available to provide Iowa's health care in the future.

Based on the findings of this report, the following recommendations are set forth:

1. All licensing boards should collect a uniform minimum data set of employment information regarding their constituents.

If licensing boards collected a minimum data set of employment information, then valuable data about potential workforce shortages could be examined and inconsistencies regarding data would be minimized. Lack of pertinent information and disparate information makes it difficult to draw appropriate conclusions from data that already exists. An in-depth review of the physician data (Appendices K and Q) illustrates the point. The Board of Medical Examiners lists 9,833 total active licensees as of 12/31/04. Of that number, 5,990 reside in Iowa. According to data from OSCEP, only 2,609 are employed as primary care physicians and mental health physicians. The differences between these numbers are significant and, depending on the data used, would yield vastly different findings.^{Note 2} The most meaningful number regarding workforce shortage issues is the employment figures provided by OSCEP. Having uniform information and having it available from a single source would help insure its accuracy.

2. The work of Iowa's Office of Statewide Clinical Education Program should be expanded to include all health professionals.

The report of the National Conference of State Legislatures⁹ states that the OSCEP project "is perhaps the country's premiere state health workforce database" (p.4). The University of Iowa has developed a computer-based tracking model that provides meaningful data about selected workforce variables. This model has been in continuous operation since the early 1970s and has a good record of providing invaluable data for employers, educators, researchers and others interested in the state's health workforce. Currently, OSCEP tracks demographic, educational, and employment data of every active primary care physician, mental health physician, dentist, pharmacist, physician assistant, and nurse practitioner. They have recently begun tracking the same information about registered nurses in the state. Their work should be extended to include all licensed and unlicensed health professions because of the value of the data.

3. Each profession should develop its own working definition of workforce shortage.

Many variables impact a potential shortage and differ among the professions. A working definition would provide parameters for measuring workforce shortage. Development of such a definition should be a collaborative effort with agencies at the national level. Information akin to that gathered by the U.S. Dept. of Health and Human Service's Bureau of Health Professions' shortage area designations¹⁰ is needed not just for primary care, dental and mental health physicians but for all professions. Prediction models need to be developed to assist in recruiting and developing a well-trained, geographically accessible, and diverse health workforce.

4. Professional associations should closely monitor issues within their profession.

Most professional associations are suffering from declining membership but it will be imperative that organizations maintain viability in order to influence the educational standards and policy decisions for their profession. They will also be prime movers in efforts to recruit new members for the profession. These activities are reaching critical stages for the various Iowa mental health professional associations in the near future.

5. Health occupational trend data should be used in planning formal and continuing education programs.

This trend data can be used by educators in planning new programs and in recruitment of students. Educators also need to be cognizant of how these expected trends might impact the availability of student preceptors as well as clinical experiences. Additionally, there are implications for succession planning to replace experienced faculty and for incorporating continuing education programs to train and retrain licensed and unlicensed health professionals. There are also implications for exploring newer teaching methods such as e-learning or telecommunications' technology.

6. This study should be replicated using data from non-licensed health professionals.

A review of the BLS workforce projections for 2002-2012 indicates that a large increase in non-licensed health care professionals is expected.^{11,12} Many factors contribute to this prediction. If the number of licensed professionals continues to decline, as is likely the case in Iowa, then one strategy that employers can use to satisfy staffing needs is to hire more non-professionals. They can provide on-the-job training to perform selected functions now done by licensed employees. A review of the ages of Iowa's non-licensed health workforce would augment information provided by this report and help support policy decisions.

Note 1: Certified Health Service Providers are licensed psychologists who have additional clinical training.

Note 2: The following explanation is helpful in understanding one aspect of the disparity in physician data. "On a per capita basis, Iowa graduated more new physicians per 100,000 population (11.7) than did the entire United States (6.4) and ranked 4th among the 46 states with medical schools in medical school graduates per capita"¹¹

References

- ¹ National Center for Health Workforce Analysis: About us. Available at <http://www.bhpr.hrsa.gov/healthworkforce/about/default.htm>.
- ² Center for Health Workforce Planning. Trends in Nursing Supply and Education. January 2005. Available at <http://www.IDPH.state.ia.us/hpcdp/health-care-access.asp>
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- ⁸ Changing Demographics and the Implications for Physicians, Nurses, and Other Health Workers (2000). Available at <http://bhpr.hrsa.gov/healthworkforce/reports/changedemo/default.htm>.
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- ¹¹ U.S. Dept. of Health and Human Service Health Resources and Services Administration. The Iowa health workforce: Highlights from the health workforce profile. Available at URL <http://bhpr.hrsa.gov/healthworkforce/reports/statesummaries/iowa.htm>.
- ¹² Center for Health Workforce Planning. (2004). Issue Brief: Health workforce projections 2002-2012. Available at URL http://www.IDPH.state.ia.us/hpcdp/health_care_access.asp.

The Center for Health Workforce Planning exists within the Iowa Department of Public Health, Bureau of Health Care Access, to assess and forecast health workforce supply and demand, address barriers to recruitment and retention, support strategies developed at the local level that prevent shortages, and engage in activities that assure a competent, diverse health workforce in Iowa. The Center is funded through the Bureau of Health Professions, Health Resources and Services Administration, U.S. Department of Health and Human Services. For further information contact the Center for Health Workforce Planning, Iowa Department of Public Health at http://www.idph.state.ia.us/hpcdp/health_care_access.asp or mkelly@idph.state.ia.us.

Appendices A - X

Appendix A

ADVANCED PRACTICE REGISTERED NURSE SUPPLEMENTAL INFORMATION

Year of First Licensure requirement: 1983

Educational Requirements:

Be licensed as a registered nurse in Iowa or be recognized for licensure in Iowa by the nurse licensure compact; complete a 12 to 18-month program leading to certification in a specialty area or a 24-month master's degree program.

Total of all Licensees:

Not available (NA)

Number of Active Licensees:

Total ¹2005 = 1,219

In-state licensees = NA

Out-of-state licensees = NA

Total ²2001 = 1,183

Advanced Practice Registered Nurse Licensees per Decade

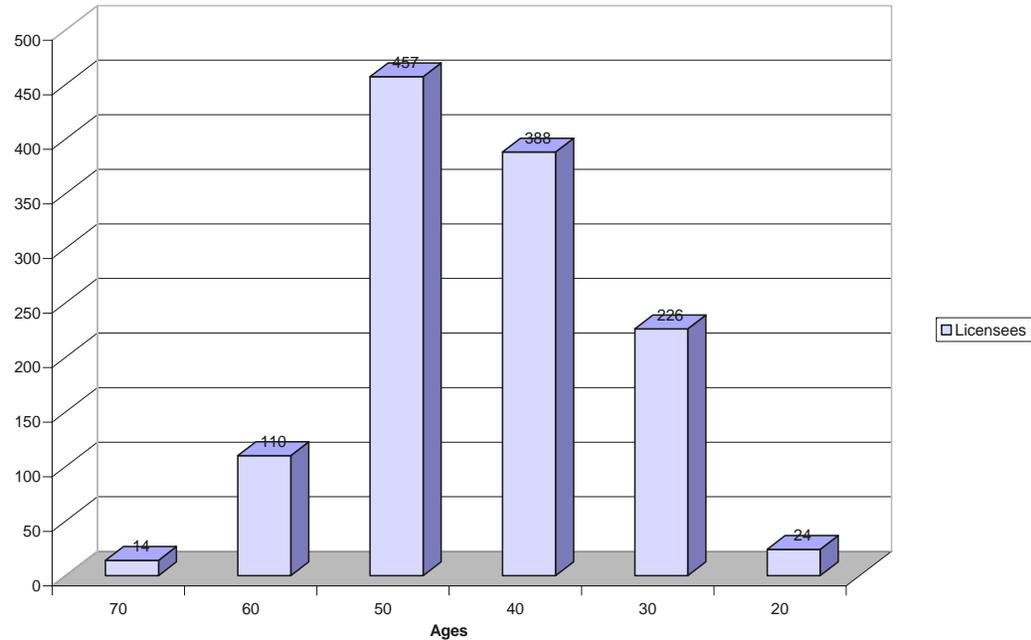


Table 1: Advanced Nurse Practitioners Specialties:

Number	Specialty
390	Family Nurse Practitioner
258	Registered Nurse Anesthetist
23	Mental Health Nurse Practitioner
34	Gerontological Nurse Practitioner
7	CNS* – Child/Adolescent Psych
13	Other

Number	Specialty
60	Nurse-Midwife
48	Adult Nurse Practitioner
8	Neonatal Nurse Practitioner
26	CNS* – Medical/Surgical
6	CNS* - Gerontology

Number	Specialty
166	Pediatric Nurse Practitioner
129	OB/Gyn Nurse Practitioner
7	Clinical Nurse Specialist
7	CNS* - Oncology
37	CNS* – Adult Psychiatric

*CNS = Clinical Nurse Specialist. ** "Other" includes categories with five or fewer licensees specifically CNS¹ – Community Health, Home Health, Nurse Practitioner, Perinatal, Acute Care, School Nurse

¹Data provided by the Iowa Board of Nursing on 12/21/04. The data includes licensees who reside in Iowa and who are considered actively licensed.

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Advanced Registered Nurse Practitioners – Ages in 2005

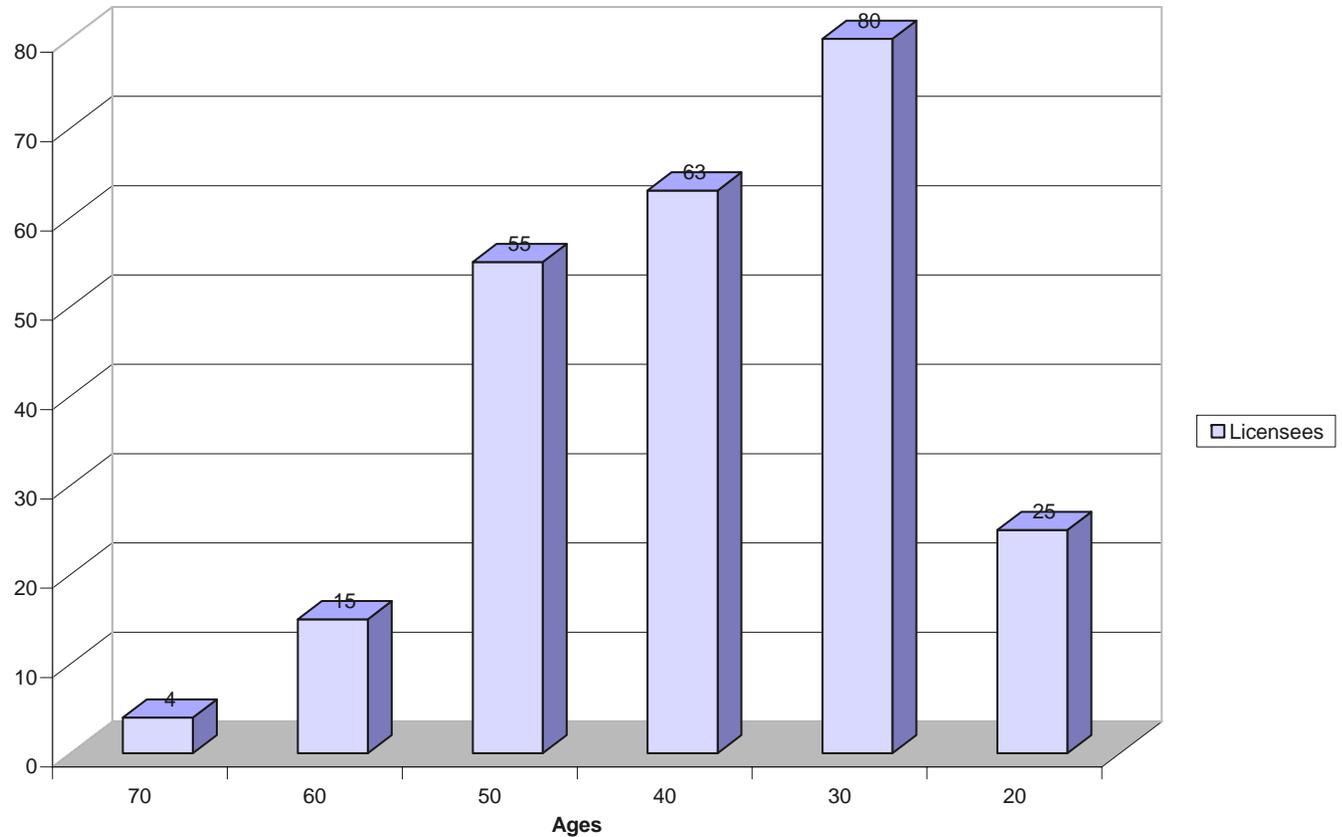
Year of Birth	Age in 2005	Totals	Percent Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	1		1956	49	61
1930	75			1957	48	42
1931	74	1		1958	47	41
1932	73	1		1959	46	40
1933	72	1		1960	45	41
1934	71	3		1961	44	39
1935	70	7		1962	43	33
1936	69	1		1963	42	39
1937	68	4		1964	41	22
1938	67	4		1965	40	30
1939	66	7		1966	39	24
1940	65	12		1967	38	21
1941	64	14		1968	37	25
1942	63	11		1969	36	23
1943	62	17		1970	35	27
1944	61	18		1971	34	25
1945	60	22		1972	33	24
1946	59	30		1973	32	24
1947	58	31		1974	31	21
1948	57	39		1975	30	12
1949	56	35		1976	29	13
1950	55	36		1977	28	4
	<i>Sub total</i>	295	<i>(24%)</i>	1978	27	4
1951	54	47		1979	26	3
1952	53	55				
1953	52	66				
1954	51	61			<i>Sub total</i>	924
1955	50	57			Grand Total	1,219

Source: Bd of Nursing 12/21/04

Appendix B

AUDIOLOGIST SUPPLEMENTAL INFORMATION

Audiologist Licensees per Decade



Year of First Licensure Requirement: 1977

Educational Requirements: Masters degree or equivalent from an accredited school, college or university with a major in audiology.

Total of all Licensees: 585 (as of 1/11/05)

Number of Active Licenses:
Total ¹2005 = 256
In-state licensees = 215
Out-of-state licensees = 41

Total ²2001 = 259

¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees was not available.

Audiologists - Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	1		1957	48	4
1930	75	2		1958	47	6
1931	74	1		1959	46	4
1932	73			1960	45	5
1933	72			1961	44	11
1934	71			1962	43	5
1935	70			1963	42	7
1936	69	1		1964	41	9
1937	68	1		1965	40	6
1938	67	1		1966	39	9
1939	66			1967	38	3
1940	65	2		1968	37	7
1941	64	1		1969	36	12
1942	63	1		1970	35	5
1943	62	3		1971	34	9
1944	61			1972	33	8
1945	60	5		1973	32	13
1946	59	1		1974	31	5
1947	58	6		1975	30	9
1948	57	4		1976	29	11
1949	56	4		1977	28	3
1950	55	4		1978	27	8
	<i>Sub total</i>	38	<i>(16%)</i>	1979	26	3
1951	54	6				
1952	53	10				
1953	52	6				
1954	51	7				
1955	50	7			<i>Sub total</i>	204
1956	49	6			Grand Total	242

Source: BPL 12/8/0

Appendix C

CHIROPRACTOR SUPPLEMENTAL INFORMATION

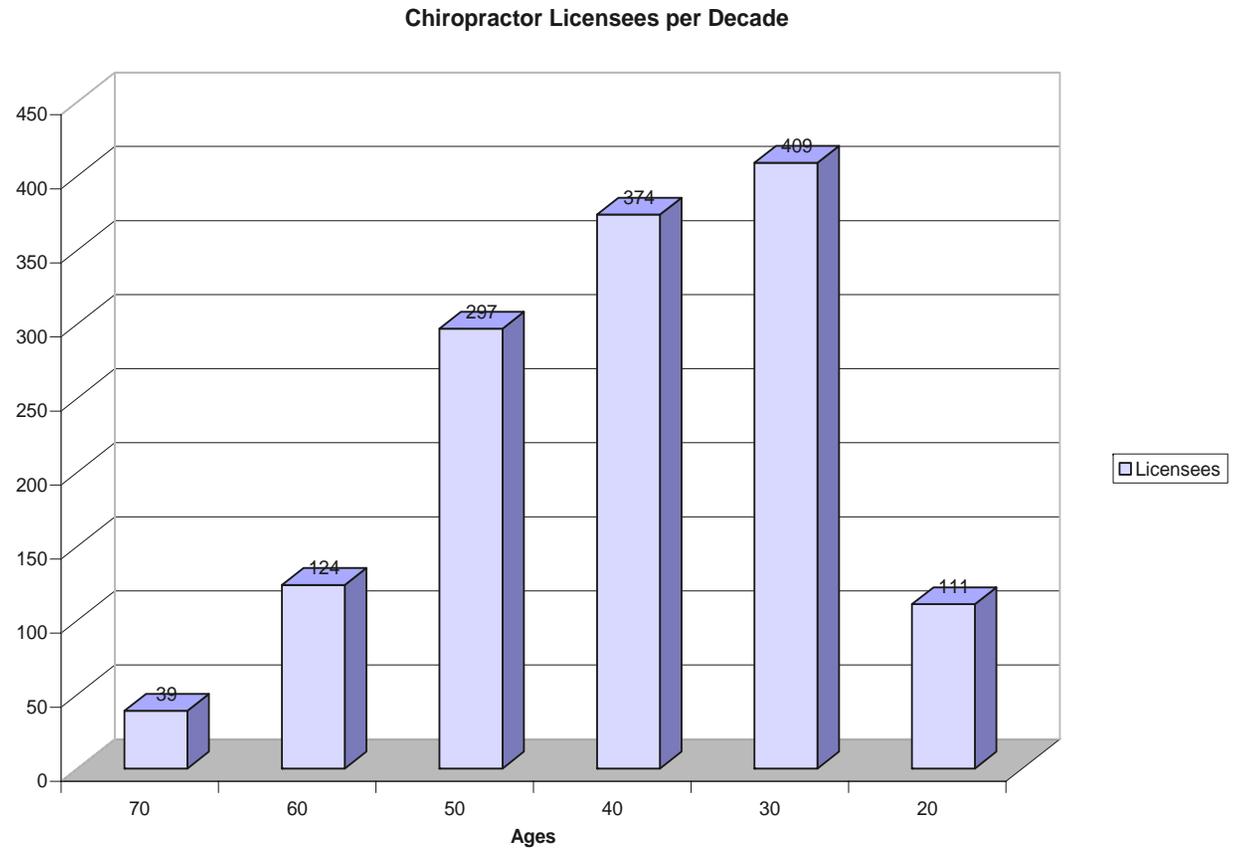
Year of First Licensure Requirement: 1902

Educational Requirements:
Graduation from a board-approved college of chiropractic medicine. The course of study covers a period of four academic years totaling not less than four thousand sixty-minute hours in actual resident attendance.

Total of all Licensees: ¹3887

Number of Active Licenses:
Total ¹2005 = 1,361
In-state licensees = 1,189
Out-of-state licensees = 172

Total ²2001 = 1,303



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of-state licensees were not available.

Chiropractors – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	20		1957	48	28
1930	75	4		1958	47	31
1931	74	2		1959	46	41
1932	73	1		1960	45	30
1933	72	1		1961	44	39
1934	71	2		1962	43	39
1935	70	9		1963	42	49
1936	69	9		1964	41	39
1937	68	5		1965	40	43
1938	67	5		1966	39	35
1939	66	10		1967	38	34
1940	65	12		1968	37	34
1941	64	11		1969	36	48
1942	63	18		1970	35	46
1943	62	11		1971	34	40
1944	61	22		1972	33	51
1945	60	21		1973	32	41
1946	59	24		1974	31	43
1947	58	23		1975	30	37
1948	57	23		1976	29	37
1949	56	34		1977	28	36
1950	55	29		1978	27	25
	<i>Sub total</i>	296	<i>(22%)</i>	1979	26	12
1951	54	31		1980	25	1
1952	53	35				
1953	52	34				
1954	51	36				
1955	50	28			<i>Sub total</i>	1,058
1956	49	35			Grand Total	1,354

Source: BPL 12/18/04

Appendix D

DENTIST SUPPLEMENTAL INFORMATION

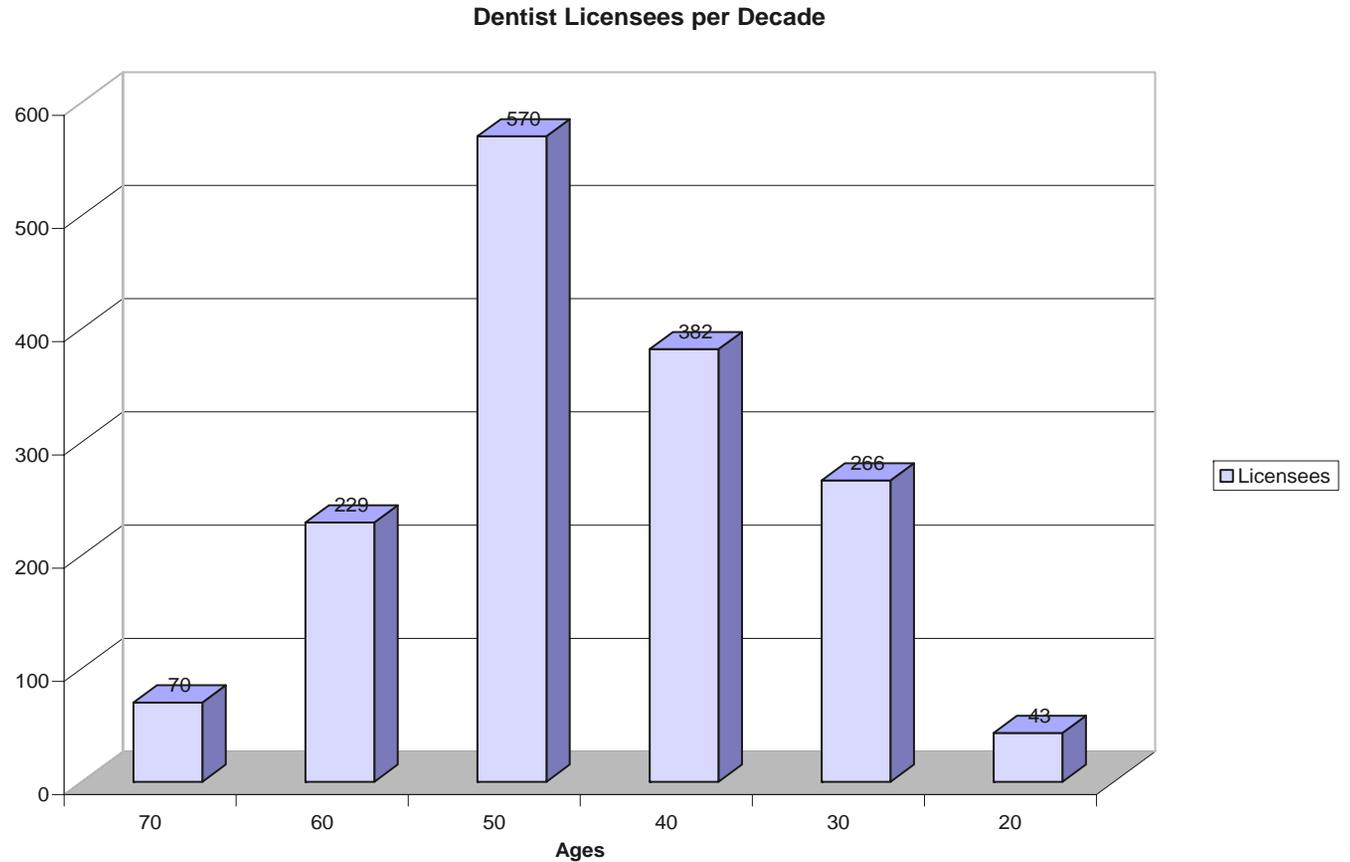
Year of First Licensure Requirement: 1882

Educational Requirements:
Graduation from an accredited dental college.

Total of all Licensees:
¹ 1,817 (as of 2/2/05)

Number of Active Licenses:
Total ¹2005 = 1,817
In-state licensees = 1,595
Out-of-state licensees = 318

Total ¹2000 = 1,903
Total ²2005 = 1,560
Total ³2000 = 1,418



¹Data provided by the Iowa Board of Dental Examiners as of 2/2/05. Includes all active licensees such as faculty and residents.

²Data provided by the Office of Statewide Clinical Education Programs, UI Carver College of Medicine 10/4/04. Includes licensees actively licensed and working in Iowa.

³Data provided by Office of Statewide Clinical Education Programs 12/31/00. Comparable data for in-state and out-of state licensees were not available.

Dentists – Ages in 2005

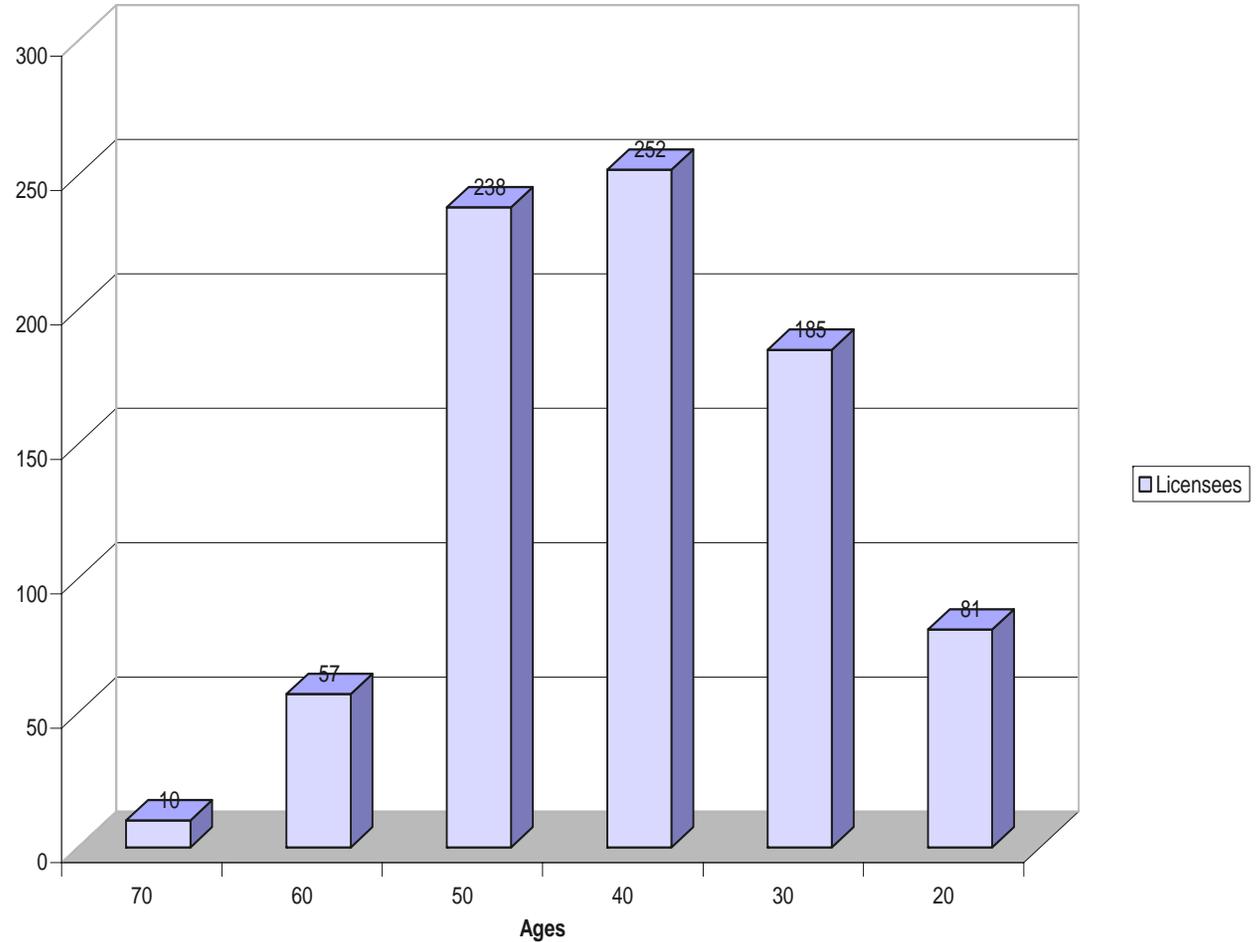
Year of Birth	Age in 2005	Endodontist	General Practice	Oral Surgeon	Orthodontist	Pediatric Dentistry	Periodontist	Prosthodontist	Other	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Endodontist	General Practice	Oral Surgeon	Orthodontist	Pediatric Dentistry	Periodontist	Prosthodontist	Other	Totals
	≥ 76		13		2				1	16		1957	48	1	38	4		2		1	4	50
1930	75		9						1	10		1958	47	1	29	1	2	1		1	6	41
1931	74		5		1		1			7		1959	46		27	2	3	1	1		3	37
1932	73		6						1	7		1960	45	2	26	3	1	2		3	1	38
1933	72		7							7		1961	44		30	2	4	2	2		6	46
1934	71		12				1		1	14		1962	43		26	2	4			1	4	37
1935	70		5		2	1			1	9		1963	42		19	2	2		2		2	27
1936	69		9	1	1		1	1	3	16		1964	41		22	2	1	1		4	3	33
1937	68		8						2	10		1965	40	1	18	1	1	2		1	6	30
1938	67	1	9	1	3	1	1		2	18		1966	39	1	18	3	2	1			4	29
1939	66	1	11	1	1		1		2	17		1967	38		18	2	2			1	1	24
1940	65		19		2				1	22		1968	37	1	20		1	2	1	1		26
1941	64		12	1	1			4	1	19		1969	36	1	23	1	1	3		1	4	34
1942	63	1	16	2	3	1	3		4	30		1970	35		23	2	4	2	1		4	36
1943	62		15	2	2	1	2	3	3	28		1971	34		20	1	1				4	26
1944	61	1	18		1	2	1	1	7	31		1972	33		26	1	1	3			1	32
1945	60	1	18	4	4	1	2	1	7	38		1973	32		15		3	2			3	23
1946	59	1	32	3	4	2	2		2	46		1974	31		17					1	2	20
1947	58	2	34	1	5		2	1	6	51		1975	30		14				1		1	16
1948	57	1	28	2	2		1	1	4	39		1976	29		20						3	23
1949	56	5	33			1	1	1	1	42		1977	28		9						2	11
1950	55	1	40		3	1			5	50		1978	27		4						1	5
<i>Sub total</i>		15	359	18	37	11	19	13	55	527	<i>(34%)</i>	1979	26		3						1	4
1951	54	1	54	3	7	2		1	3	71												
1952	53	1	57	4	2		4		4	72												
1953	52	1	66	2	1		2	3	6	81												
1954	51	1	47	1		2		1	8	60												
1955	50	2	40	3	3	3		1	6	58		<i>Sub Total</i>	15	761	43	48	32	14	22	98	1,033	
1956	49	1	32	1	2	1		1	5	43		Grand Total	30	1,120	61	85	43	33	35	153	1,560	

Source: OSCEP 10/01/04

Appendix E

DIETITIANS SUPPLEMENTAL INFORMATION

Dietitian Licensees per Decade



Year of First Licensure Requirement: 1985

Educational Requirements: Baccalaureate degree with major course work in human nutrition, food and nutrition, nutrition education, dietetics, or food systems management or an equivalent major course of minimum academic requirements as established by the American Dietetic Association and approved by the board.

Total of all Licensees:
¹1,645

Number of Active Licenses:
Total ¹2005 = 813
In-state licensees = 724
Out-of-state licensees = 89

Total ²2001 = 1,005

¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Dietitians – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	3		1957	48	36
1930	75	1		1958	47	33
1931	74	1		1959	46	28
1932	73			1960	45	16
1933	72			1961	44	29
1934	71	3		1962	43	18
1935	70	2		1963	42	26
1936	69	3		1964	41	23
1937	68	2		1965	40	12
1938	67	5		1966	39	21
1939	66	4		1967	38	21
1940	65	3		1968	37	24
1941	64	12		1969	36	18
1942	63	8		1970	35	17
1943	62	6		1971	34	15
1944	61	8		1972	33	12
1945	60	6		1973	32	21
1946	59	14		1974	31	15
1947	58	14		1975	30	21
1948	57	18		1976	29	16
1949	56	15		1977	28	23
1950	55	20		1978	27	19
	<i>Sub total</i>	<i>148</i>	<i>(18%)</i>	1979	26	16
1951	54	25		1980	25	7
1952	53	30				
1953	52	38				
1954	51	31				
1955	50	33			<i>Sub total</i>	<i>675</i>
1956	49	31			Grand total	823

Source: BPL 12/13/04

Appendix F

EMERGENCY MEDICAL SERVICE WORKERS SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement:

Basic Care Providers:
 EMT-A = September 1970;
 First Responder = August 1974;
 ERT = April 1975.

Advanced Care Providers:
 EMT-D = July 1978;
 EMT-I = July 1978;
 EMT -P = July 1978;
 First Responder-D = July 1989

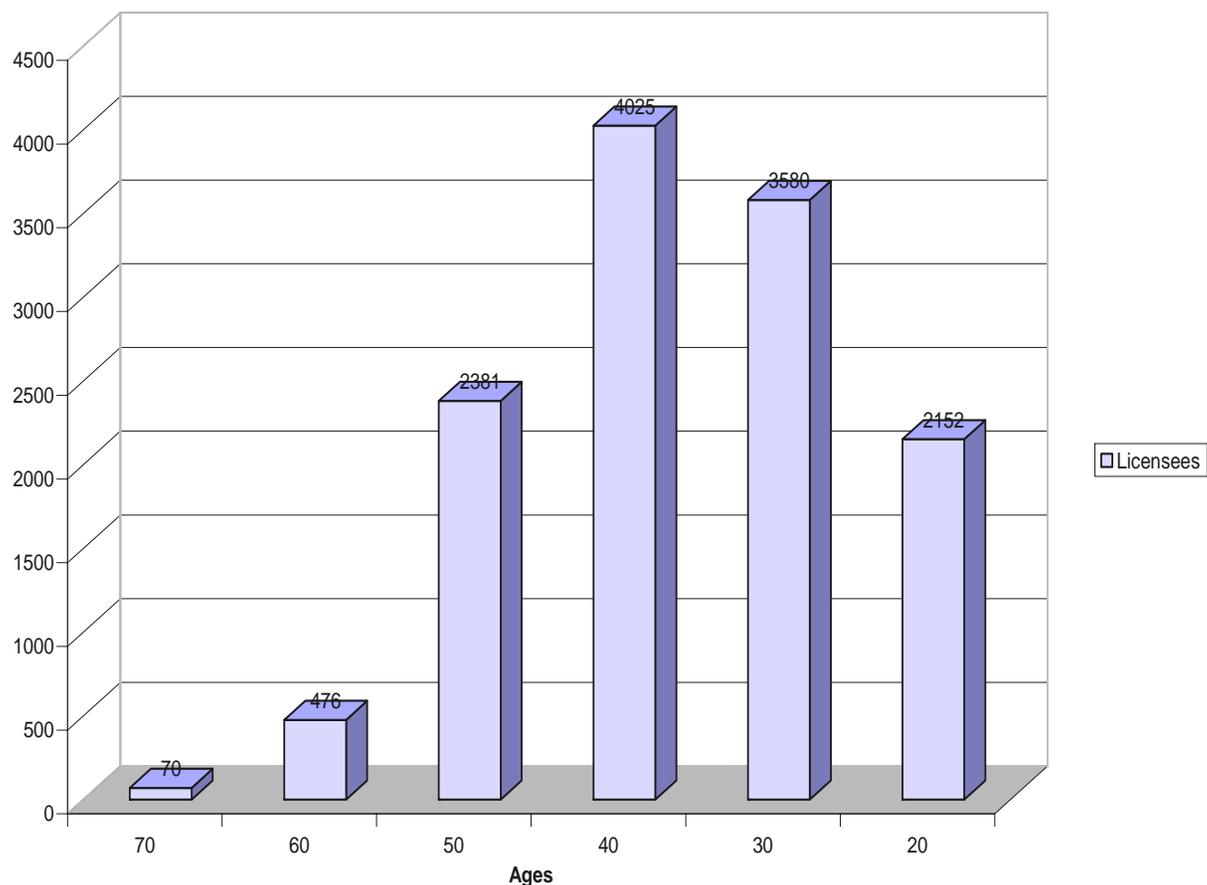
Educational Requirements:
 Varies. Must be 17 years of age and able to read and write English.

Total of all Licensees:
 77,220

Number of Active Licensees:
 Total ¹2005 = 12,685
 In-state licensees = 12,150
 Out-of-state licensees = 535

Total ²2001 = 13,056

Emergency Medical Service Worker Licensees per Decade



¹Data provided by the Bureau of Emergency Medical Services on 12/28/04

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not av

Emergency Medical Service Workers – Ages in 2005

Year of Birth	Age in 2005	EMT – A	EMT – B	EMT – D	First Responder	Intermediate	Paramedic	Paramedic Specialist	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	EMT – A	EMT – B	EMT – D	First Responder	Intermediate	Paramedic	Paramedic Specialist	Totals
	≥ 76		11		7				18		1958	47		209	4	89	32	20	46	400
1930	75		2	1				1	4		1959	46	1	207	1	97	59	16	55	436
1931	74	1	3		3			1	8		1960	45	1	205		86	55	25	67	439
1932	73		4		1				5		1961	44	1	196	1	89	43	16	59	405
1933	72		2		2	2			6		1962	43		199	2	85	45	25	49	405
1934	71		5		5	1			11		1963	42		197	1	85	38	15	48	384
1935	70		8		4	5	1		18		1964	41		188	1	89	36	19	50	383
1936	69		8		8	7			23		1965	40		200	1	66	38	20	63	388
1937	68	1	11		3	1		1	17		1966	39		179		76	35	18	49	357
1938	67		12		6	2		1	21		1967	38	1	185		82	38	18	63	387
1939	66		20		12	8	1		41		1968	37		201		51	37	24	57	370
1940	65		24		8	3		1	36		1969	36		185	3	61	42	25	67	383
1941	64		27	2	18	1	4	3	55		1970	35	1	201		55	46	30	67	400
1942	63		33		15	6	2	5	61		1971	34		185		61	38	24	52	360
1943	62	1	41		17	8	4	3	74		1972	33		208		53	34	20	51	366
1944	61		33	1	15	13	4	5	71		1973	32	1	218		29	31	27	56	362
1945	60		37	4	23	7	3	4	78		1974	31		178	1	49	21	22	50	321
1946	59		51	2	26	9	5	6	99		1975	30		167		27	17	20	43	274
1947	58		74		39	22	3	13	151		1976	29		170		24	14	17	46	271
1948	57	1	89	1	38	18	5	11	163		1977	28		174		25	19	21	42	281
1949	56	2	88		49	14	6	29	188		1978	27		156		24	14	17	54	265
1950	55	1	98	1	55	22	3	18	198		1979	26		176		24	13	16	36	265
<i>Sub total</i>		7	681	12	354	149	41	102	1,346	<i>(11%)</i>	1980	25		151		26	15	8	25	225
1951	54		120		69	26	13	30	258		1981	24		161		19	10	15	30	235
1952	53	1	146	1	61	27	12	35	283		1982	23		145		15	12	5	19	196
1953	52		179	1	69	42	6	39	336		1983	22		127		13	11	4	9	164
1954	51	1	164		90	35	16	34	340		1984	21		107		9	7		6	129
1955	50		182	3	72	41	19	48	365		1985	≤ 20		106		11	1		3	121
1956	49	1	199		91	41	12	52	396		<i>Sub Total</i>		12	6,152	20	1,970	1,053	584	1,548	8,972
1957	48	3	181		98	40	19	48	389		<i>Grand Total</i>		19	6,833	32	2,324	1,202	625	1,650	12,685

Source: BEMS 12/28/04

Appendix G

HEALTH SERVICE PROVIDER SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1984

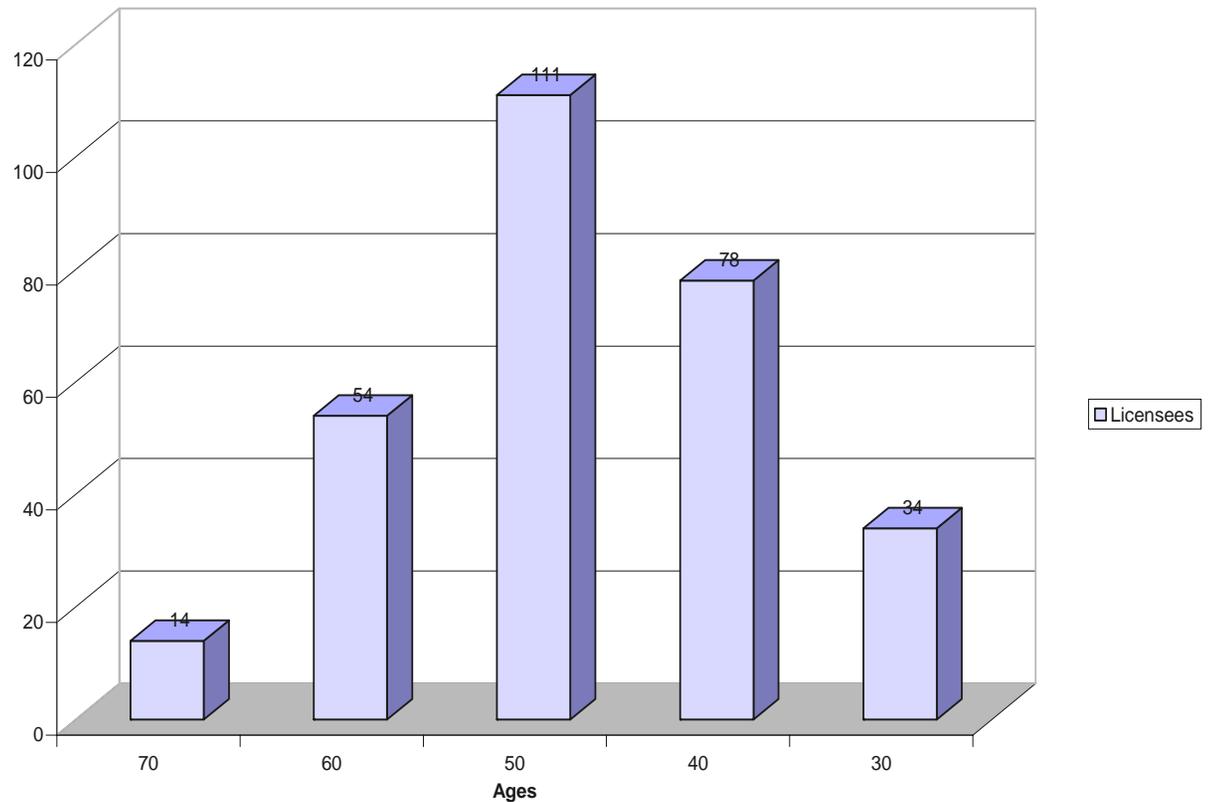
Educational Requirements:
 Psychology degree with at least two years of clinical experience in a recognized health service setting or meet the standards of the National Register of Health Service Providers in Psychology.

Total of all Licensees:
¹446

Number of Active Licenses:
 Total ¹2005 = 293
 In-state licensees = 274
 Out-of-state licensees = 19

Total ²2001 = 287

Health Service Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees was not available.

Health Service Providers - Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	2		1957	48	13
1930	75			1958	47	3
1931	74	2		1959	46	4
1932	73	2		1960	45	9
1933	72	4		1961	44	10
1934	71	1		1962	43	8
1935	70	3		1963	42	8
1936	69	1		1964	41	6
1937	68	4		1965	40	10
1938	67	6		1966	39	10
1939	66	1		1967	38	7
1940	65	4		1968	37	3
1941	64	10		1969	36	2
1942	63	6		1970	35	7
1943	62	4		1971	34	2
1944	61	8		1972	33	2
1945	60	10		1973	32	
1946	59	11		1974	31	1
1947	58	10				
1948	57	13				
1949	56	14				
1950	55	14				
	<i>Sub total</i>	<i>130</i>	<i>(45%)</i>			
1951	54	12				
1952	53	14				
1953	52	8				
1954	51	10				
1955	50	5			<i>Sub total</i>	<i>161</i>
1956	49	7			Grand Total	291

Source: BPL 12/21/04

Appendix H

LICENSED PRACTICAL NURSE SUPPLEMENTAL INFORMATION

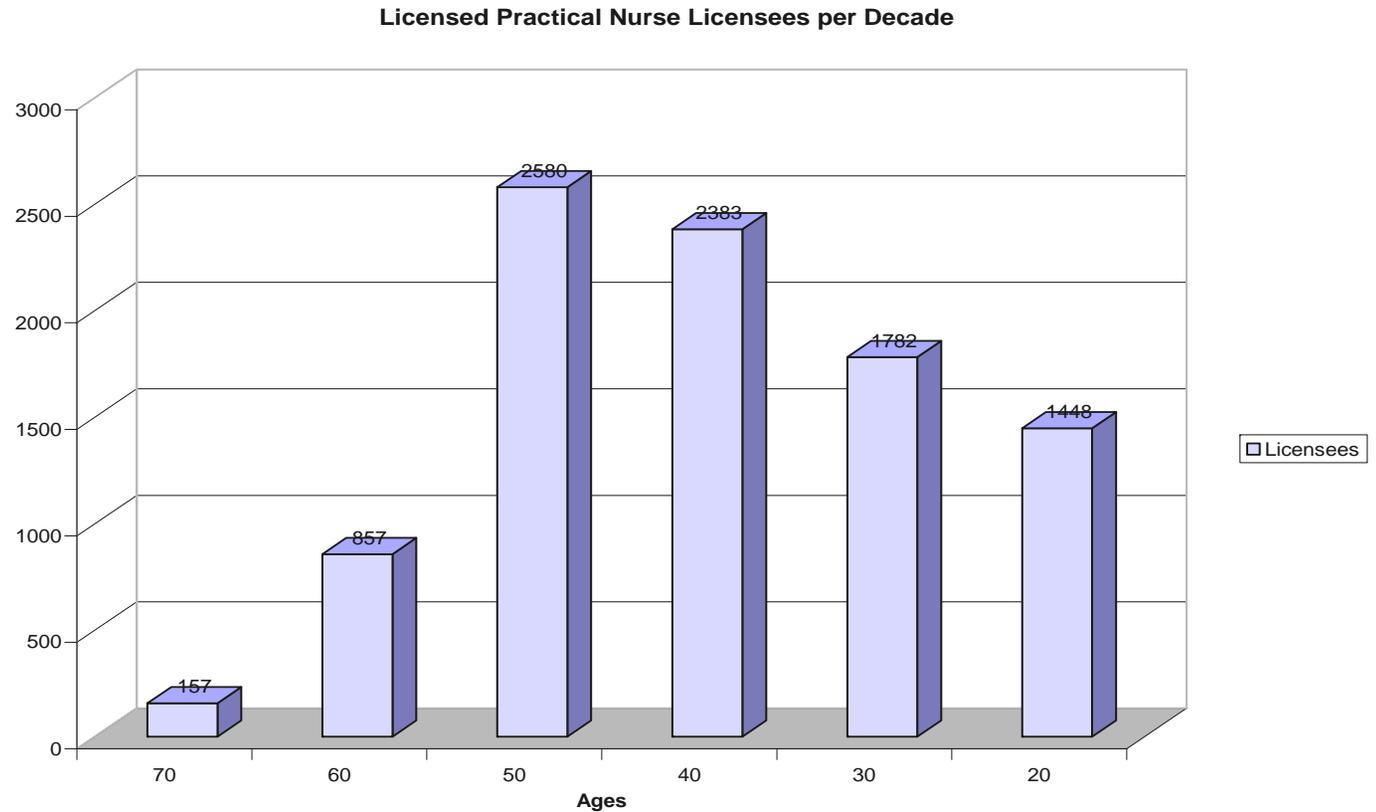
Year of First Licensure Requirement: 1963

Educational Requirements:
High school graduate or equivalent; graduate from an approved school of nursing at the practical nurse level

Total of all Licensees:
Information not available (NA)

Number of Active Licenses:
Total ¹2004 = 9,208
In-state licensees = 9,208
Out-of-state licensees = NA

Total ²2001 = 9,429



¹Data provided by the Iowa Board of Nursing on 12/21/04. The data only includes licensees who reside in Iowa and who are considered actively licensed.

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Licensed Practical Nurses – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	32		1957	48	280
1930	75	11		1958	47	269
1931	74	14		1959	46	239
1932	73	16		1960	45	246
1933	72	24		1961	44	218
1934	71	30		1962	43	253
1935	70	30		1963	42	213
1936	69	35		1964	41	215
1937	68	49		1965	40	175
1938	67	60		1966	39	140
1939	66	54		1967	38	188
1940	65	74		1968	37	166
1941	64	92		1969	36	163
1942	63	119		1970	35	189
1943	62	133		1971	34	204
1944	61	122		1972	33	195
1945	60	119		1973	32	174
1946	59	147		1974	31	182
1947	58	215		1975	30	181
1948	57	201		1976	29	172
1949	56	245		1977	28	158
1950	55	236		1978	27	191
	Sub total	2,058	22%	1979	26	180
1951	54	285		1980	25	212
1952	53	320		1981	24	148
1953	52	314		1982	23	170
1954	51	301		1983	22	144
1955	50	316		1984	21	56
1956	49	275		1985	≤ 20	17
					Sub total	7,149
					Grand Total	9,208

Source: Bd of Nursing

Appendix I

MARITAL AND FAMILY THERAPIST SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1998

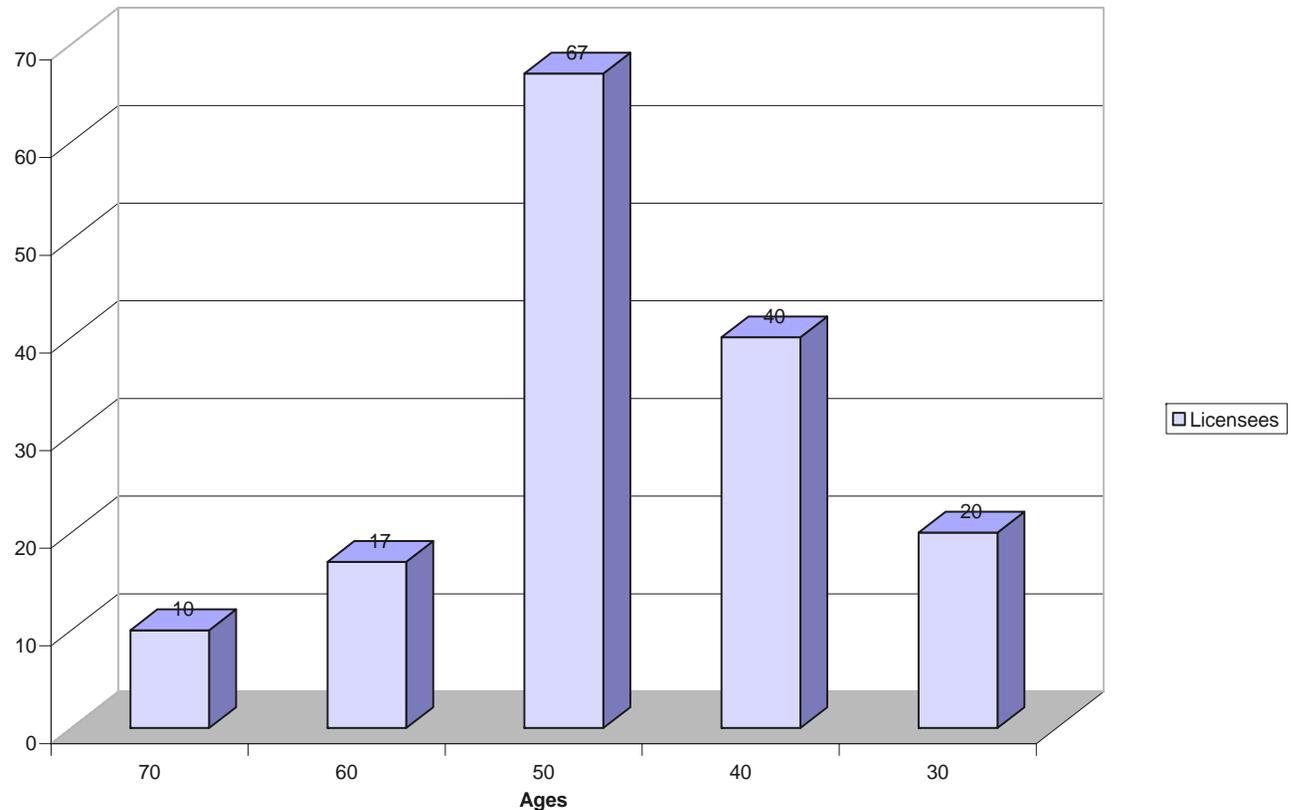
Educational Requirements: Requires a 45-hour master's degree or doctoral degree in Marital and Family Therapy or its equivalent from an accredited college or university. Must have two years of supervised clinical experience.

Total of all Licensees:
¹222

Number of Active Licenses:
Total ¹2005 = 149
In-state licensees = 139
Out-of-state licensees = 10

Total ²2000 = 168

Marital and Family Therapist Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees was not available.

Marital and Family Therapists – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & over	Year of Birth	Age in 2005	Totals
1929	≥ 76	1		1957	48	5
1930	75	1		1958	47	4
1931	74			1959	46	4
1932	73			1960	45	8
1933	72			1961	44	1
1934	71	2		1962	43	5
1935	70			1963	42	5
1936	69	1		1964	41	2
1937	68	1		1965	40	3
1938	67	2		1966	39	2
1939	66	1		1967	38	4
1940	65	1		1968	37	1
1941	64			1969	36	1
1942	63	1		1970	35	3
1943	62	1		1971	34	3
1944	61	5		1972	33	2
1945	60	4		1973	32	2
1946	59	2		1974	31	1
1947	58	10		1975	30	1
1948	57	4				
1949	56	8				
1950	55	11				
	<i>Sub total</i>	56	<i>(38%)</i>			
1951	54	7				
1952	53	11				
1953	52	4				
1954	51	5				
1955	50	5			<i>Sub total</i>	92
1956	49	3			Grand Total	148

Source: BPL 12/15/04

Appendix J

MENTAL HEALTH COUNSELOR SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1998

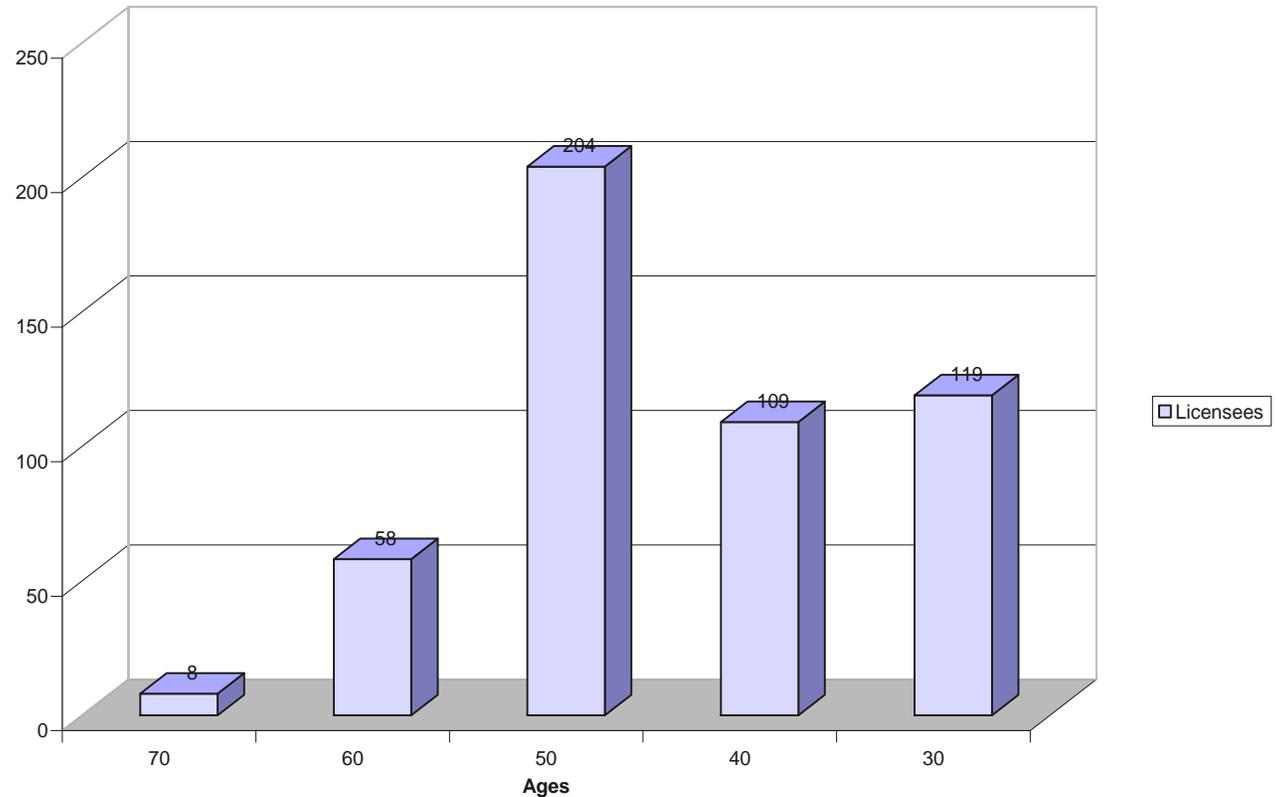
Educational Requirements:
Requires a 45-hour master's degree or a doctoral degree in mental health counseling or its equivalent from an accredited college or university. Must have two years of supervised clinical experience.

Total of all Licensees:
686

Number of Active Licenses:
Total ¹2005 = 509
In-state licensees = 454
Out-of-state licensees = 55

Total ²2001 = 517

Mental Health Counselor Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees was not available.

Mental Health Counselors – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	2		1957	48	10
1930	75	2		1958	47	11
1931	74			1959	46	14
1932	73	1		1960	45	11
1933	72	1		1961	44	11
1934	71	2		1962	43	17
1935	70			1963	42	8
1936	69	1		1964	41	10
1937	68			1965	40	7
1938	67	5		1966	39	10
1939	66	3		1967	38	11
1940	65	9		1968	37	16
1941	64	5		1969	36	13
1942	63	2		1970	35	15
1943	62	8		1971	34	18
1944	61	12		1972	33	11
1945	60	13		1973	32	11
1946	59	13		1974	31	6
1947	58	24		1975	30	5
1948	57	26		1976	29	3
1949	56	19				
1950	55	22				
	<i>Sub total</i>	<i>170</i>	<i>(34%)</i>			
1951	54	21				
1952	53	18				
1953	52	27				
1954	51	18				
1955	50	16			<i>Sub total</i>	328
1956	49	10			Grand Total	498

Source: BPL 12/18/04

Appendix K

MENTAL HEALTH PHYSICIANS SUPPLEMENTAL INFORMATION

Year of First Licensure

Requirement: 1886 = M.D.; 1907 = D.O.
Combined to form Board of Medical
Examiners in 1968

Educational Requirements:

Graduate from an approved college
of medicine and surgery or an
approved college of osteopathic
medicine and surgery. Must have
completed one year of post-graduate
training in an approved hospital-
affiliated program in the U.S. or Canada.

Total of all Licensees:

Specialty data not available (NA)

Number of Active Licenses:

Total ¹2004 = 322
In-state licensees = 322
Out-of-state licensees = NA

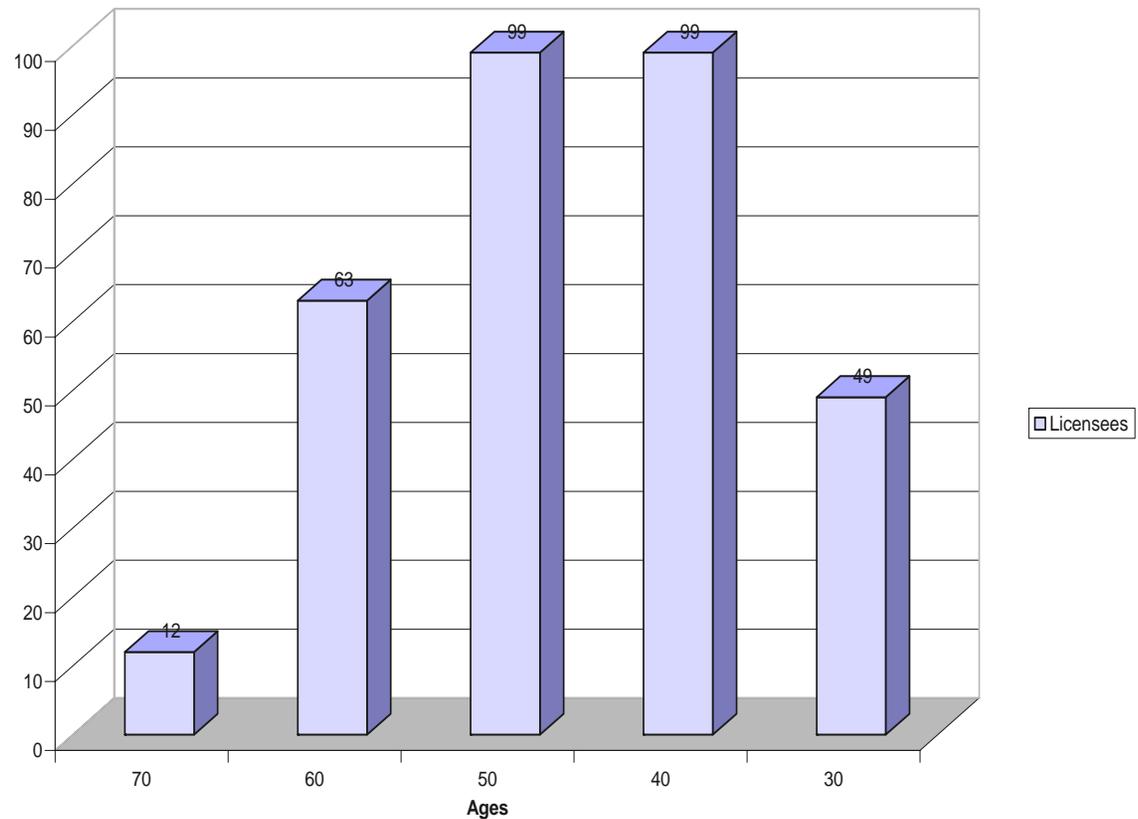
Total ²2000 = 231

¹Data provided by OSCEP* on 10/01/04

²Data provided by OSCEP* on 1/26/05 in personal communication

*OSCEP data includes physicians who are actively licensed and currently practicing in their profession in Iowa.

Mental Health Physicians per Decade



Mental Health Physicians – Ages in 2005

Year of Birth	Age in 2005	Child Psychiatrist	Psychiatrist	Other	Total	Percentage Age 55 & Over	Year of Birth	Age in 2005	Child Psychiatrist	Psychiatrist	Other	Total
	≥ 76		5		5		1955	50	3	7	8	18
1930	75		2		2		1956	49	2	4	4	10
1931	74			2	2		1957	48	1	4	2	7
1932	73		1		1		1958	47	1	6	2	9
1933	72		1		1		1959	46	3	9	1	13
1934	71			1	1		1960	45		7	4	11
1935	70		2		2		1961	44		5	1	6
1936	69	1	2		3		1962	43		7	5	12
1937	68		2	2	4		1963	42	3	8	3	14
1938	67		2	1	3		1964	41	1	4	5	10
1939	66	1	5		6		1965	40	2	2	3	7
1940	65		5	1	6		1966	39		4	2	6
1941	64		1	3	4		1967	38		9	1	10
1942	63	1	6		7		1968	37	1	5	3	9
1943	62		4	4	8		1969	36		8		8
1944	61		8	3	11		1970	35		2	5	7
1945	60	1	5	3	9		1971	34		1	1	2
1946	59		3	4	7		1972	33		4		4
1947	58	1	2	1	4		1973	32		1	1	2
1948	57		3	1	4		1974	31			1	1
1949	56	2	6	1	9							
1950	55	1	11	2	14							
	Sub total	8	76	29	113	(35%)						
1951	54	1	6	4	11							
1952	53	2	4	2	8							
1953	52	2	7		9			Sub total	23	126	60	209
1954	51	1	12	2	15			Grand Total	31	202	89	322

Source: OSCEP 10/01/04

Appendix L

NURSING HOME ADMINISTRATOR SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1971

Educational Requirements:

Baccalaureate degree in health care administration from an accredited college or university. This accreditation must be a board-approved regional accrediting agency, or organization affiliated with the National Commission of Accreditation or the national Association of Boards of Examiners of Long Term Care Administrators. Another path available based on college credits.

Total of all Licensees:

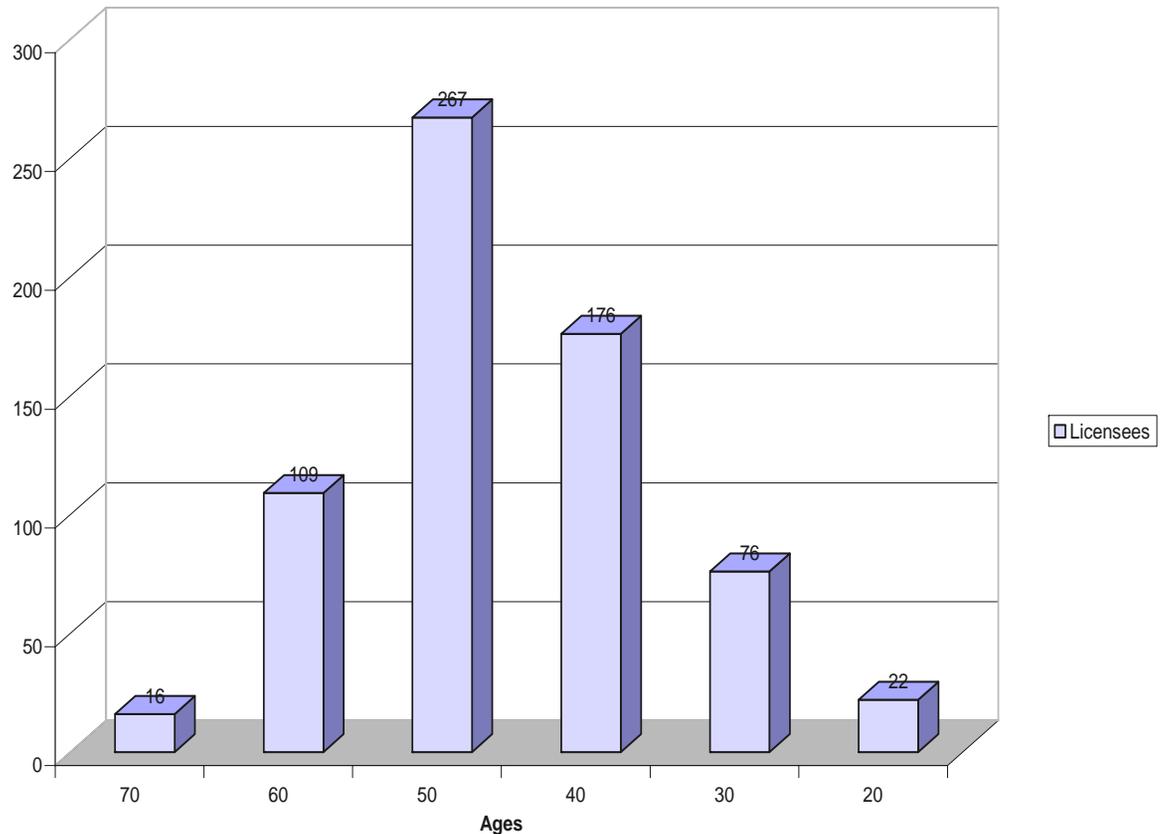
2,222

Number of Active Licenses:

Total ¹2005 = 670
 In-state licensees = 583
 Out-of-state licensees = 87

Total ²2001 = 756

Nursing Home Administrator Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Nursing Home Administrators – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	3		1957	48	19
1930	75	2		1958	47	20
1931	74			1959	46	26
1932	73	2		1960	45	18
1933	72	4		1961	44	21
1934	71			1962	43	17
1935	70	5		1963	42	17
1936	69	4		1964	41	10
1937	68	3		1965	40	10
1938	67	7		1966	39	12
1939	66	5		1967	38	9
1940	65	9		1968	37	9
1941	64	17		1969	36	8
1942	63	21		1970	35	14
1943	62	17		1971	34	9
1944	61	14		1972	33	7
1945	60	12		1973	32	2
1946	59	15		1974	31	1
1947	58	25		1975	30	5
1948	57	32		1976	29	3
1949	56	27		1977	28	7
1950	55	32		1978	27	6
	<i>Sub total</i>	256	(38%)	1979	26	1
1951	54	29		1980	25	1
1952	53	27		1981	24	3
1953	52	27		1982	23	1
1954	51	25				
1955	50	28			<i>Sub total</i>	410
1956	49	18			Grand Total	666

Source: BPL 12/13/04

Appendix M

OCCUPATIONAL THERAPIST SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1981

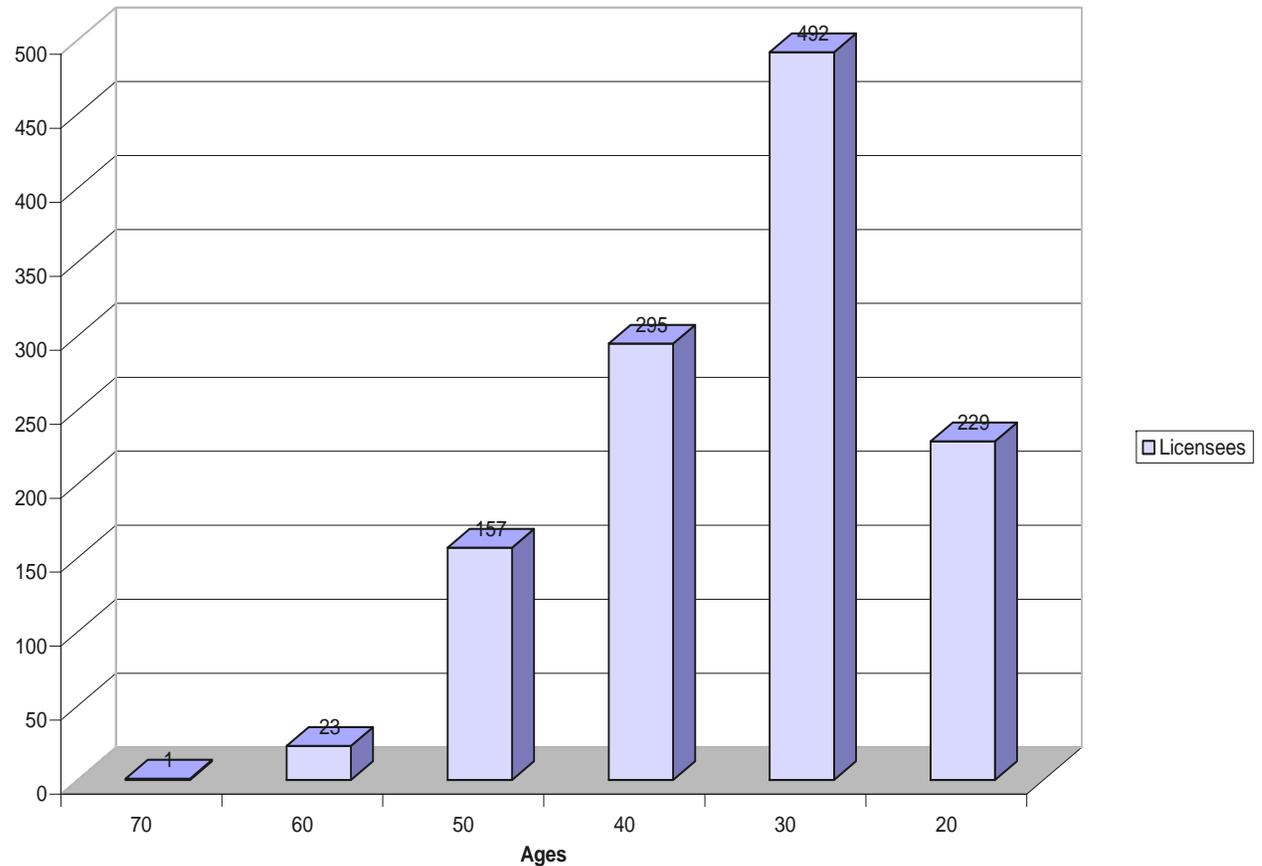
Educational Requirements:
Degree in occupational therapy from a licensed program accredited by the Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association and six months of supervised field experience.

Total of all Licensees:
¹1,673

Number of Active Licenses:
Total ¹2005 = 835
In-state licensees = 647
Out-of-state licensees = 128

Total ²2001 = 1049

Occupational Therapist Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Occupational Therapists - Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76			1958	47	31
1930	75			1959	46	27
1931	74			1960	45	32
1932	73			1961	44	30
1933	72			1962	43	31
1934	71			1963	42	29
1935	70	1		1964	41	32
1936	69			1965	40	37
1937	68	1		1966	39	31
1938	67			1967	38	34
1939	66			1968	37	42
1940	65	3		1969	36	57
1941	64	3		1970	35	53
1942	63	4		1971	34	41
1943	62	5		1972	33	52
1944	61	3		1973	32	66
1945	60	4		1974	31	52
1946	59	6		1975	30	64
1947	58	11		1976	29	52
1948	57	8		1977	28	49
1949	56	7		1978	27	47
1950	55	11		1979	26	37
	<i>Sub total</i>	67	<i>(6%)</i>	1980	25	20
1951	54	12		1981	24	17
1952	53	24		1982	23	2
1953	52	28		1983	22	4
1954	51	29		1984	21	1
1955	50	21				
1956	49	28			<i>Sub total</i>	1,130
1957	48	18			Grand Total	1,197

Source: BPL 12/13/04

Appendix N

OPTOMETRIST SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1931

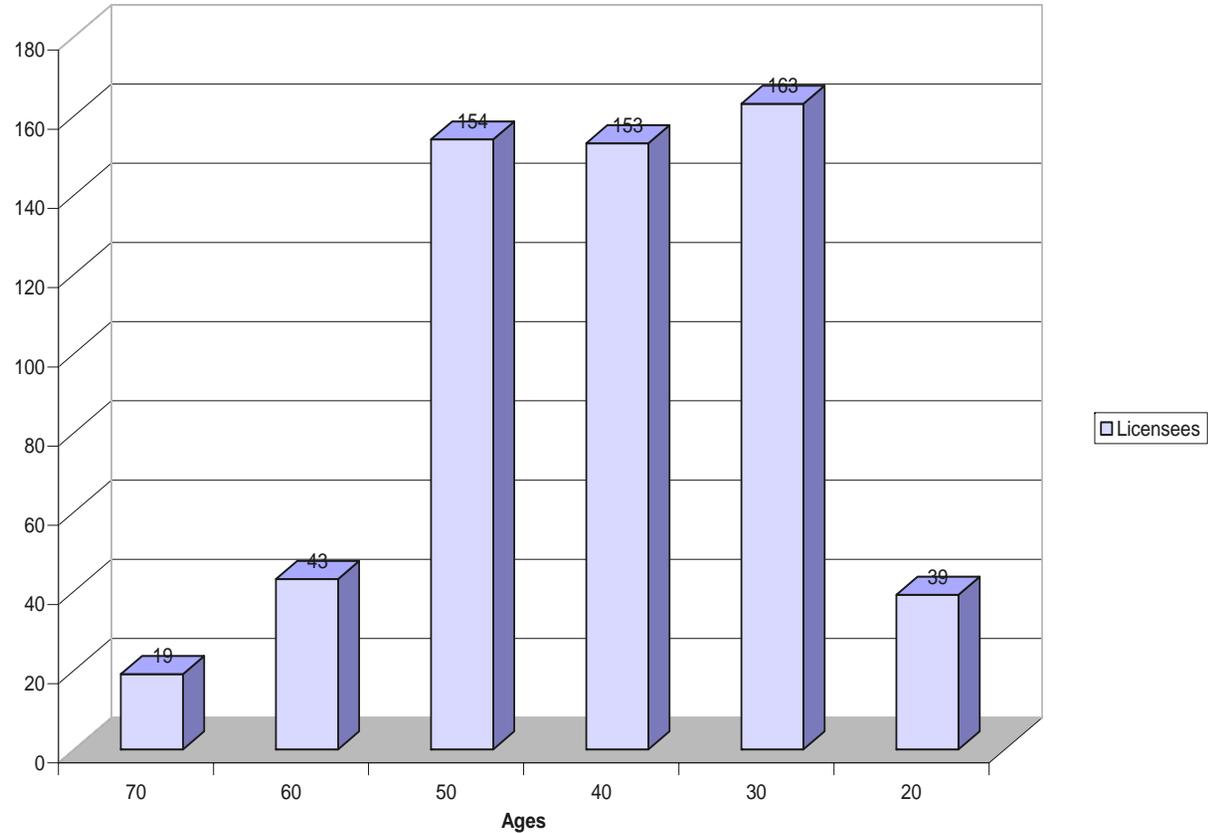
Educational Requirements:
Requires a high school diploma and graduate from a school or college of optometry accredited by a regional or professional accreditation organization that is recognized or approved by the council on postsecondary accreditation of the U. S. Department of Education and approved by the Iowa Board of Optometry Examiners.

Total of all Licensees:
¹1,253

Number of Active Licenses:
Total ¹2005 = 575
In-state licensees = 447
Out-of-state licensees = 128

Total ²2001 = 623

Optometrist Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Optometrists – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	9		1956	49	11
1930	75			1957	48	17
1931	74	1		1958	47	13
1932	73	4		1959	46	16
1933	72	2		1960	45	12
1934	71	3		1961	44	17
1935	70			1962	43	10
1936	69	1		1963	42	18
1937	68	1		1964	41	21
1938	67	4		1965	40	18
1939	66			1966	39	27
1940	65	6		1967	38	9
1941	64	7		1968	37	17
1942	63	5		1969	36	11
1943	62	6		1970	35	12
1944	61	6		1971	34	20
1945	60	7		1972	33	23
1946	59	10		1973	32	15
1947	58	14		1974	31	13
1948	57	7		1975	30	16
1949	56	19		1976	29	17
1950	55	13		1977	28	14
	<i>Sub total</i>	<i>125</i>	<i>(22%)</i>	1978	27	7
1951	54	23		1979	26	1
1952	53	19				
1953	52	19				
1954	51	16			<i>Sub total</i>	<i>446</i>
1955	50	14			Grand Total	571

Source: BPL 12/13/04

Appendix O

PHARMACIST SUPPLEMENTAL INFORMATION

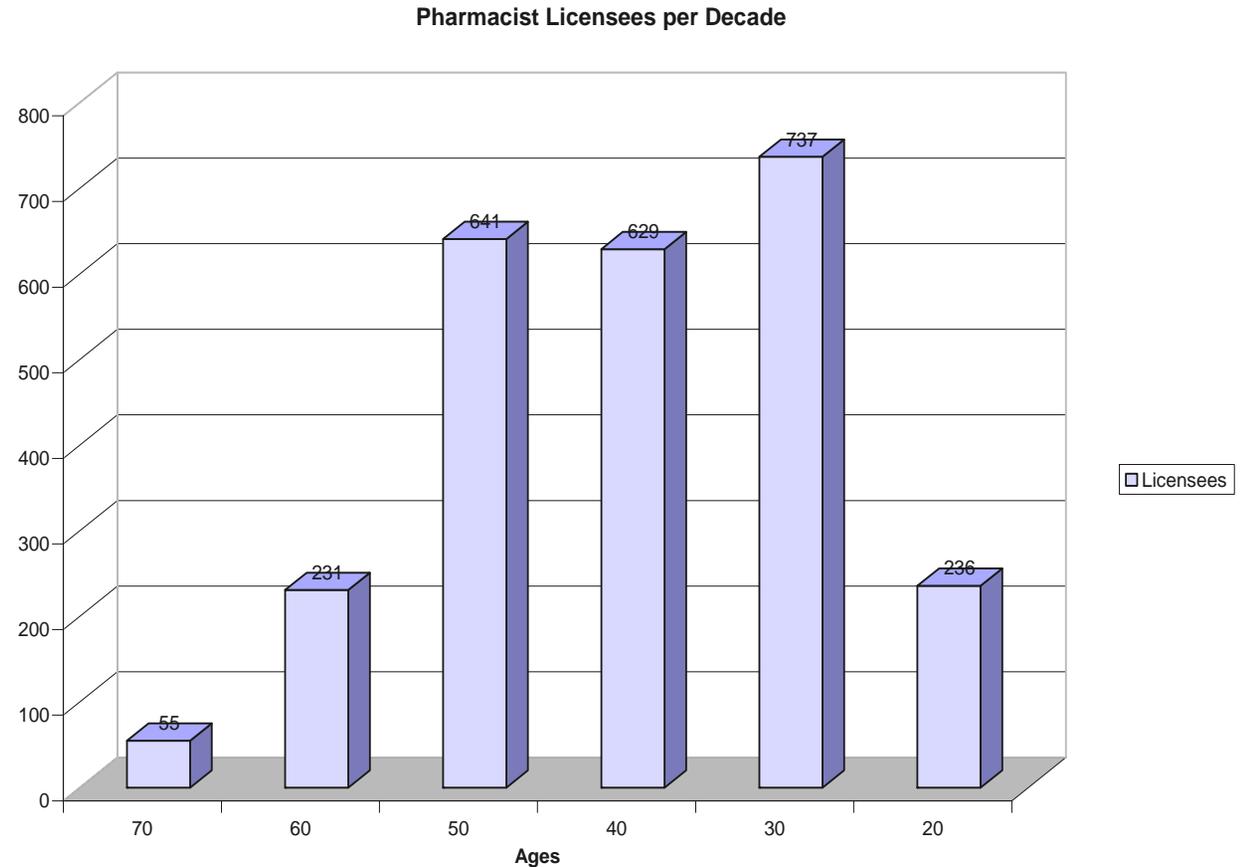
Year of First Licensure Requirement: 1880

Educational Requirements:
Graduate of an accredited college or school of pharmacy with a minimum of a bachelor of science in Pharmacy with additional requirements regarding internships.

Total of all Licensees:
¹5,118

Number of Active Licenses:
Total ¹2005 = 2,529
In-state licensees = 2,920
Out-of-state licensees = 2,198

Total ²2000 = 2,454



¹Data provided by the Iowa Board of Pharmacy Examiners on 1/28/05

²Data provided by OSCEP*

*OSCEP data includes Iowa pharmacists who are actively licensed and currently working in the state.

Pharmacists – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	14		1957	48	81
1930	75	4		1958	47	55
1931	74	4		1959	46	68
1932	73	10		1960	45	59
1933	72	1		1961	44	56
1934	71	13		1962	43	60
1935	70	9		1963	42	69
1936	69	8		1964	41	54
1937	68	10		1965	40	54
1938	67	8		1966	39	53
1939	66	15		1967	38	83
1940	65	21		1968	37	91
1941	64	25		1969	36	69
1942	63	41		1970	35	74
1943	62	31		1971	34	89
1944	61	42		1972	33	75
1945	60	30		1973	32	65
1946	59	53		1974	31	63
1947	58	47		1975	30	75
1948	57	48		1976	29	79
1949	56	57		1977	28	59
1950	55	56		1978	27	47
	<i>Sub total</i>	<i>547</i>	<i>(22%)</i>	1979	26	35
1951	54	73		1980	25	13
1952	53	77		1981	24	1
1953	52	82		1982	≤ 23	2
1954	51	52				
1955	50	96			<i>Sub total</i>	<i>1,982</i>
1956	49	73			Grand Total	2,259

Source: BPE 11/30/04

Appendix P

PHYSICIAN ASSISTANT SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1988

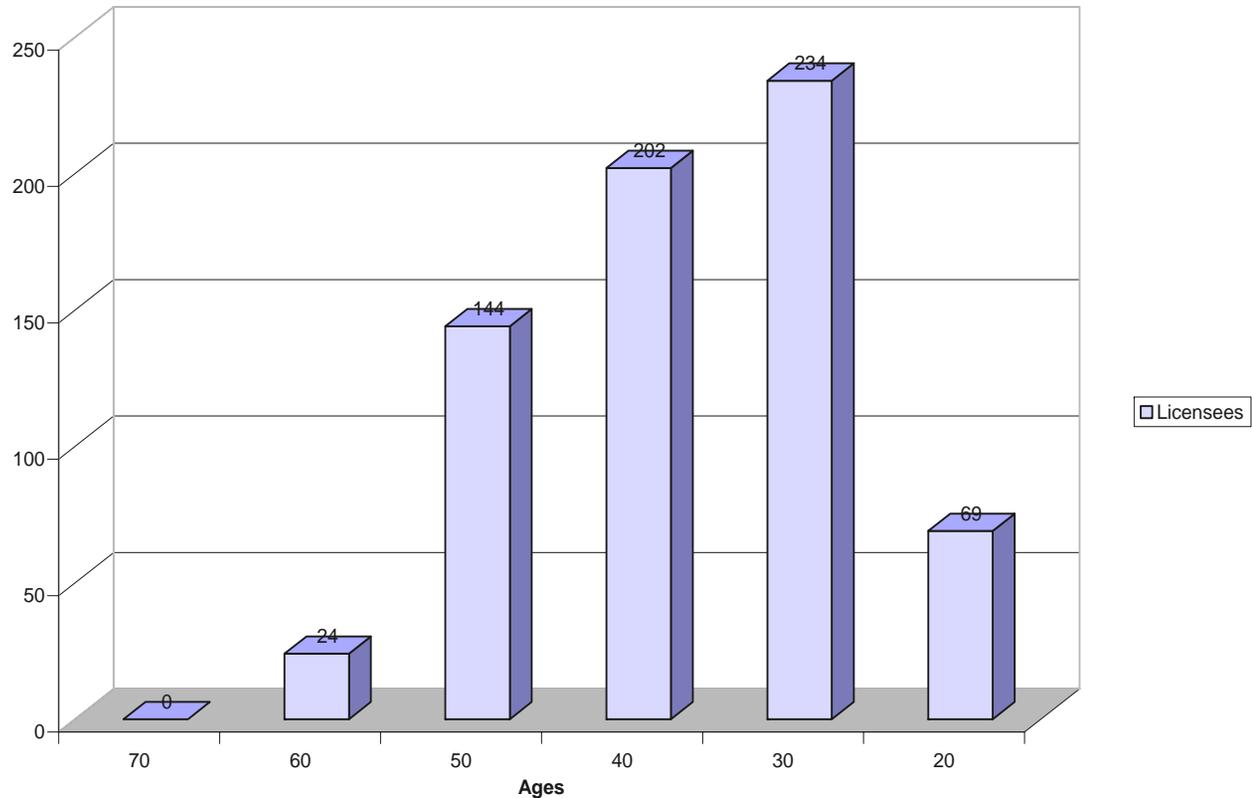
Educational Requirements:
Graduate from an educational program for the instruction of a physician assistant that meets the essential requirements and criteria established by the Committee on Allied Health Education and Accreditation or the Council on Accreditation of Allied Health educational Programs or their successor programs.

Total of all Licensees:
¹1,026

Number of Active Licenses:
Total ¹2005 = 690
In-state licensees = 592
Out-of-state licensees = 98

Total ²2001 = 583

Physician Assistant Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Physician Assistants – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55& Over	Year of Birth	Age in 2005	Totals
	≥ 76			1956	49	18
1930	75			1957	48	15
1931	74			1958	47	20
1932	73			1959	46	20
1933	72			1960	45	16
1934	71			1961	44	22
1935	70			1962	43	22
1936	69			1963	42	26
1937	68	1		1964	41	16
1938	67	1		1965	40	27
1939	66	1		1966	39	22
1940	65	2		1967	38	14
1941	64	1		1968	37	24
1942	63	2		1969	36	25
1943	62			1970	35	17
1944	61	5		1971	34	24
1945	60	11		1972	33	25
1946	59	6		1973	32	29
1947	58	5		1974	31	16
1948	57	11		1975	30	38
1949	56	16		1976	29	17
1950	55	10		1977	28	25
	Sub total	72	(11%)	1978	27	18
1951	54	15		1979	26	9
1952	53	19				
1953	52	12				
1954	51	23			Sub total	601
1955	50	27			Grand Total	673

Source: BPL 12/14/04

Appendix Q

PHYSICAL THERAPIST SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement: 1965

Educational Requirements

Graduate from a physical therapy program accredited by a national accrediting agency approved by the board. The professional curriculum must be equivalent to the Commission of Accreditation in Physical Therapy Education standards.

Total of all Licensees:

¹3,726

Number of Active Licenses:

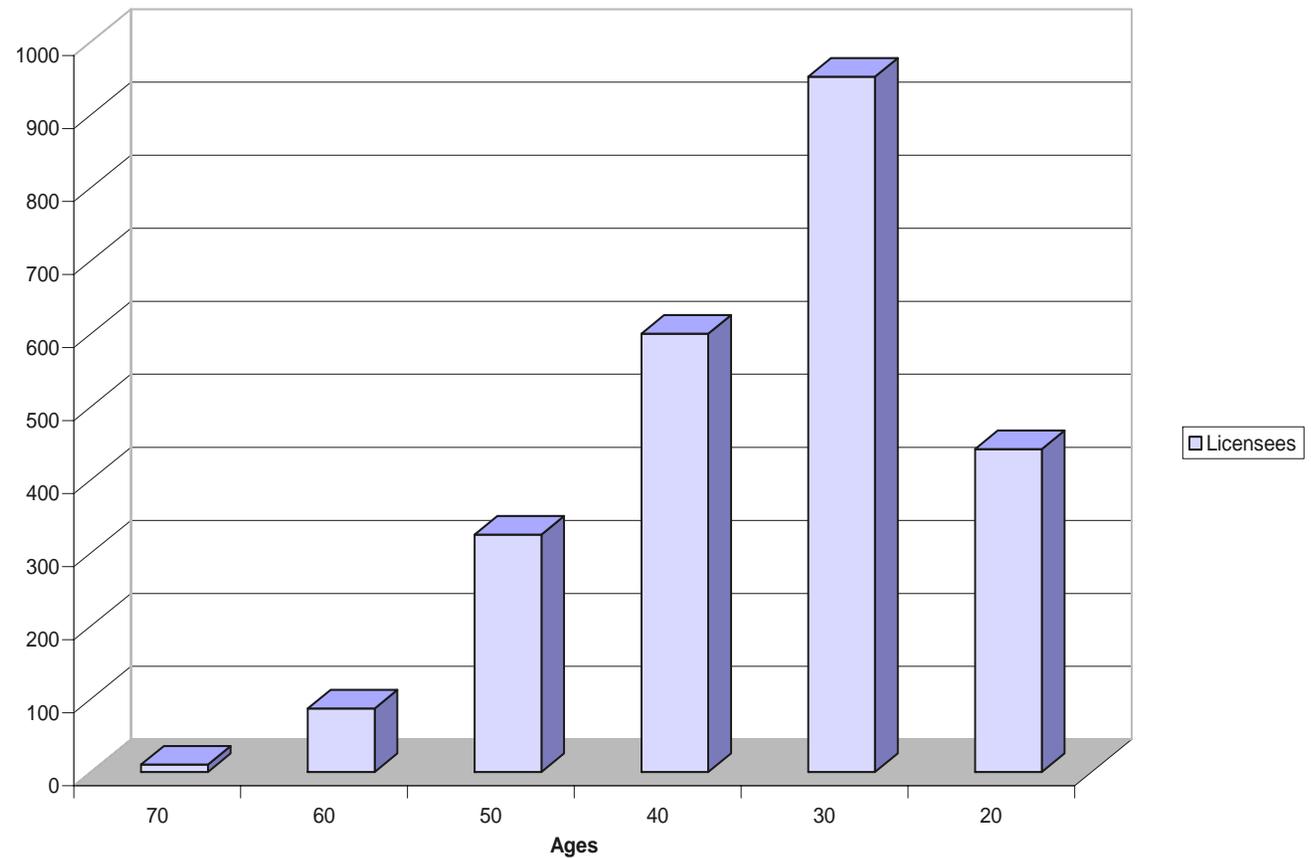
Total ¹2005 = 1,726

In-state licensees = 1,318

Out-of-state licensees = 408

Total ²2001 = 2,044

Physical Therapy Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees was not available.

Physical Therapists – Ages in 2005

Year Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	3		1958	47	53
1930	75			1959	46	59
1931	74			1960	45	60
1932	73	1		1961	44	60
1933	72	2		1962	43	61
1934	71	2		1963	42	52
1935	70	2		1964	41	76
1936	69	2		1965	40	80
1937	68	3		1966	39	72
1938	67	2		1967	38	66
1939	66	8		1968	37	87
1940	65	5		1969	36	90
1941	64	11		1970	35	105
1942	63	8		1971	34	113
1943	62	19		1972	33	97
1944	61	17		1973	32	107
1945	60	12		1974	31	99
1946	59	22		1975	30	116
1947	58	19		1976	29	106
1948	57	37		1977	28	113
1949	56	33		1978	27	98
1950	55	26		1979	26	67
	<i>Sub total</i>	234	<i>(9%)</i>	1980	25	23
1951	54	39		1981	24	18
1952	53	41		1982	23	10
1953	52	41		1983	22	6
1954	51	67		1984	21	1
1955	50	68				
1956	49	50			<i>Sub total</i>	2,250
1957	48	49			Grand Total	2,484

Source: BPL 12/13/04

Appendix R

PHYSICIAN SUPPLEMENTAL INFORMATION

Year of First Licensure Requirement:

M.D. = 1886; D.O. = 1907.
Combined to form the Board of Medical Examiners in 1968.

Educational Requirements:

Graduate from an approved college of medicine and surgery or an approved college of osteopathic medicine and surgery. Must have completed one year of post-graduate training in an approved hospital-affiliated program in the U.S. or Canada.

Total of Active Licensees:

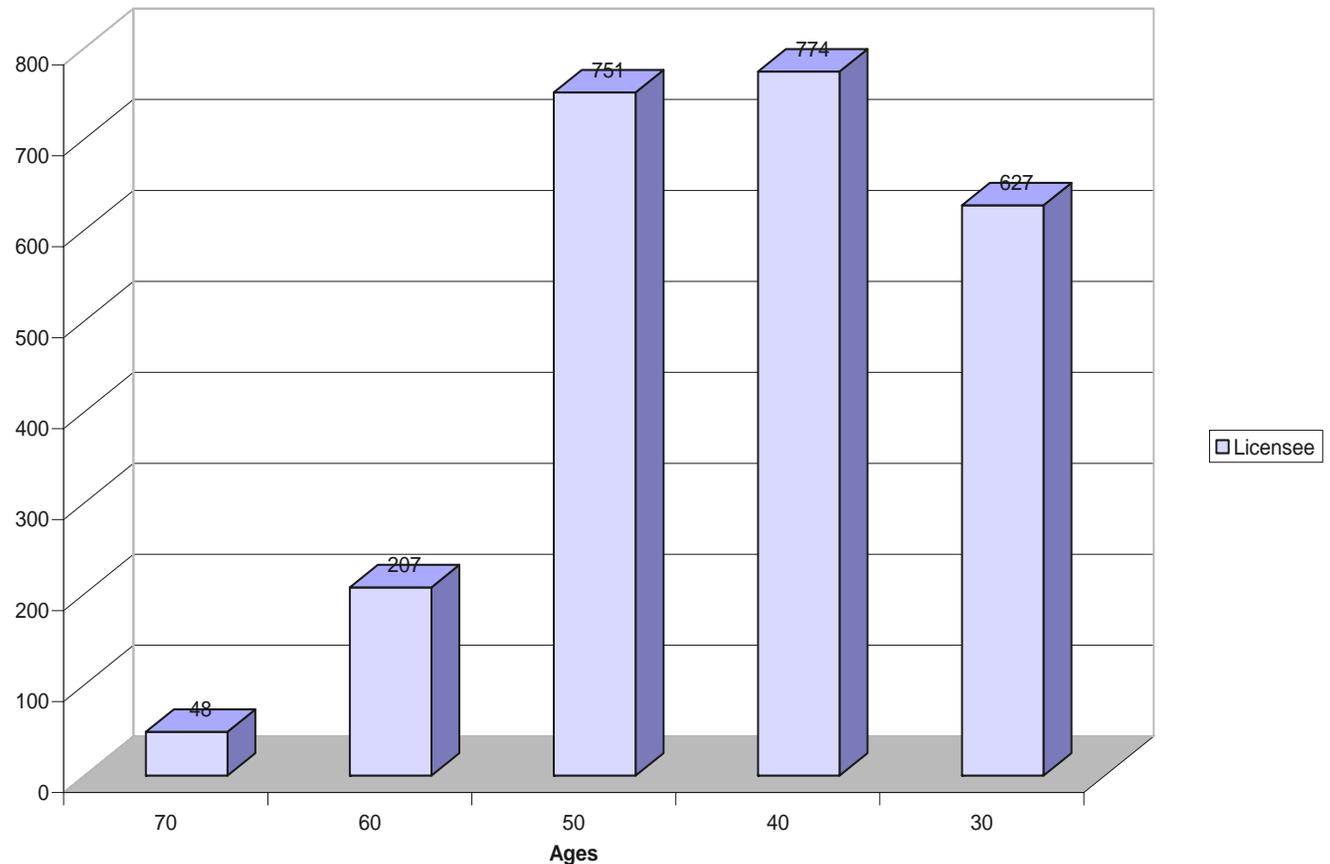
¹9,833

Total Physicians Residing in Iowa with Active Licenses:

¹2005 = 5,990

¹2000 = 5,850

Physician Licensee per Decade



¹Data extracted from the Iowa Board of Medical Examiners web site (www.docboard.org/ia) as of 12/31/04. It includes the total number of physicians residing in Iowa with an active license. The number reflects all physicians whereas the physician data on the next page was provided by OSCEP. OSCEP data includes only primary care and other types of physicians but excludes psychiatrists who are shown elsewhere in this report. OSCEP profiles active licensees who are also actively employed in their profession in Iowa,

Physicians- Ages in 2005

Year of Birth	Age in 2005	Family Practice	General Internal Medicine	General Pediatrics	Obstetrics & Gynecology	Other	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Family Practice all types	General Internal Medicine	General Pediatrics	Obstetrics & Gynecology	Other	Totals
	≥ 76	12	2		1		15		1954	51	48	15	4	6	12	85
1930	75	2					2		1955	50	53	16	6	6	18	99
1931	74	4					4		1956	49	44	11	7	10	8	80
1932	73	5					5		1957	48	45	11	6	12	15	89
1933	72	4			1	1	6		1958	47	48	10	5	9	10	82
1934	71	3			2		5		1959	46	35	15	11	11	10	82
1935	70	3	3	1	3	1	11		1960	45	42	11	9	7	16	85
1936	69	6	3				9		1961	44	37	9	10	14	16	86
1937	68	8		2	1	3	14		1962	43	27	13	6	7	10	63
1938	67	7		2		3	12		1963	42	32	8	6	2	8	56
1939	66	6	1	1		2	10		1964	41	37	10	9	11	12	79
1940	65	10	1	1	1		13		1965	40	31	10	8	9	14	72
1941	64	9	2	2	2		15		1966	39	45	11	6	2	9	73
1942	63	9	3	5	1	2	20		1967	38	45	19	8	6	5	83
1943	62	7	7	3	5	5	27		1968	37	37	15	5	4	4	65
1944	61	27	4	7	5	2	45		1969	36	44	17	7	6	10	84
1945	60	15	7	6	3	11	42		1970	35	39	21	8	3	20	91
1946	59	28	8	7	4	5	52		1971	34	36	7	9	8	8	68
1947	58	30	8	4	5	6	53		1972	33	33	16	6	3	10	68
1948	57	33	4	4	5	8	54		1973	32	23	7	3	1	9	43
1949	56	46	12	7	4	1	70		1974	31	22	6	4	1	5	38
1950	55	34	16	7	6	7	70		1975	30	7		1		5	13
	<i>Sub total</i>	308	81	59	49	57	554	(23%)	1976	29					1	1
1951	54	37	22	1	3	15	78									
1952	53	45	19	6	2	15	87			<i>Sub total</i>	953	318	159	147	276	1,853
1953	52	61	19	8	4	11	103			Grand Total	1261	399	218	196	333	2,407

Source: OSCEP/sorted 10/10/04

Appendix S

PODIATRIST SUPPLEMENTAL INFORMATION

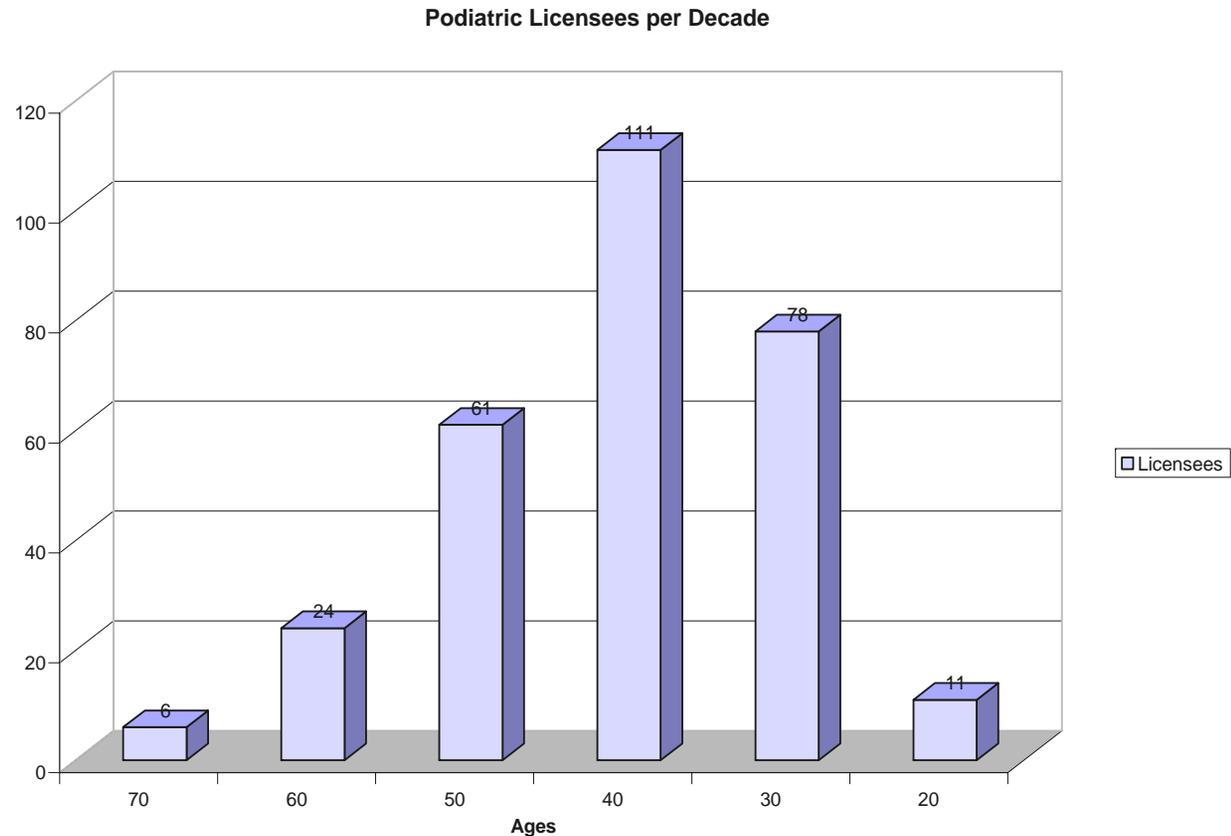
Year of First Licensure Requirement: 1933

Educational Requirements:
Graduate from an accredited school of podiatry approved by the Council on Podiatric Medical Education of the American Podiatric Medical Association.

Total of all Licensees:
¹637

Number of Active Licensees:
Total ¹2005 = 227
In-state licensees = 170
Out-of-state licensees = 57

Total ²2001 = 282



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Podiatrists – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55& Over	Year of Birth	Age in 2005	Totals
1929	> 76	3		1957	48	8
1930	75			1958	47	10
1931	74	1		1959	46	10
1932	73			1960	45	8
1933	72			1961	44	12
1934	71	1		1962	43	11
1935	70	1		1963	42	11
1936	69	1		1964	41	11
1937	68	1		1965	40	12
1938	67	1		1966	39	9
1939	66	1		1967	38	7
1940	65			1968	37	11
1941	64	3		1969	36	7
1942	63	3		1970	35	9
1943	62	5		1971	34	8
1944	61	5		1972	33	10
1945	60	4		1973	32	4
1946	59	5		1974	31	8
1947	58	6		1975	30	5
1948	57	4		1976	29	2
1949	56	2		1977	28	6
1950	55	4		1978	27	1
	<i>Sub total</i>	51	<i>(18%)</i>	1979	26	1
1951	54	8		1980	25	
1952	53	12		1981	24	
1953	52	12		1982	23	1
1954	51	6				
1955	50	9			<i>Sub total</i>	240
1956	49	18			Grand Total	291

Source: BPL 12/21/04

Appendix T

PSYCHOLOGIST SUPPLEMENTAL INFORMATION

Psychologist Licensees per Decade

Year of First Licensure Requirement: 1975

Educational Requirements:

Doctorate degree in psychology granted by an institution or professional psychology program accredited by the North Central Association of Colleges and Secondary Schools or an equivalent accrediting association or entity in other region of the U.S. and completion of one year professional employment experience under the supervision of an Iowa licensed psychologist.

Total of all Licensees:

¹967

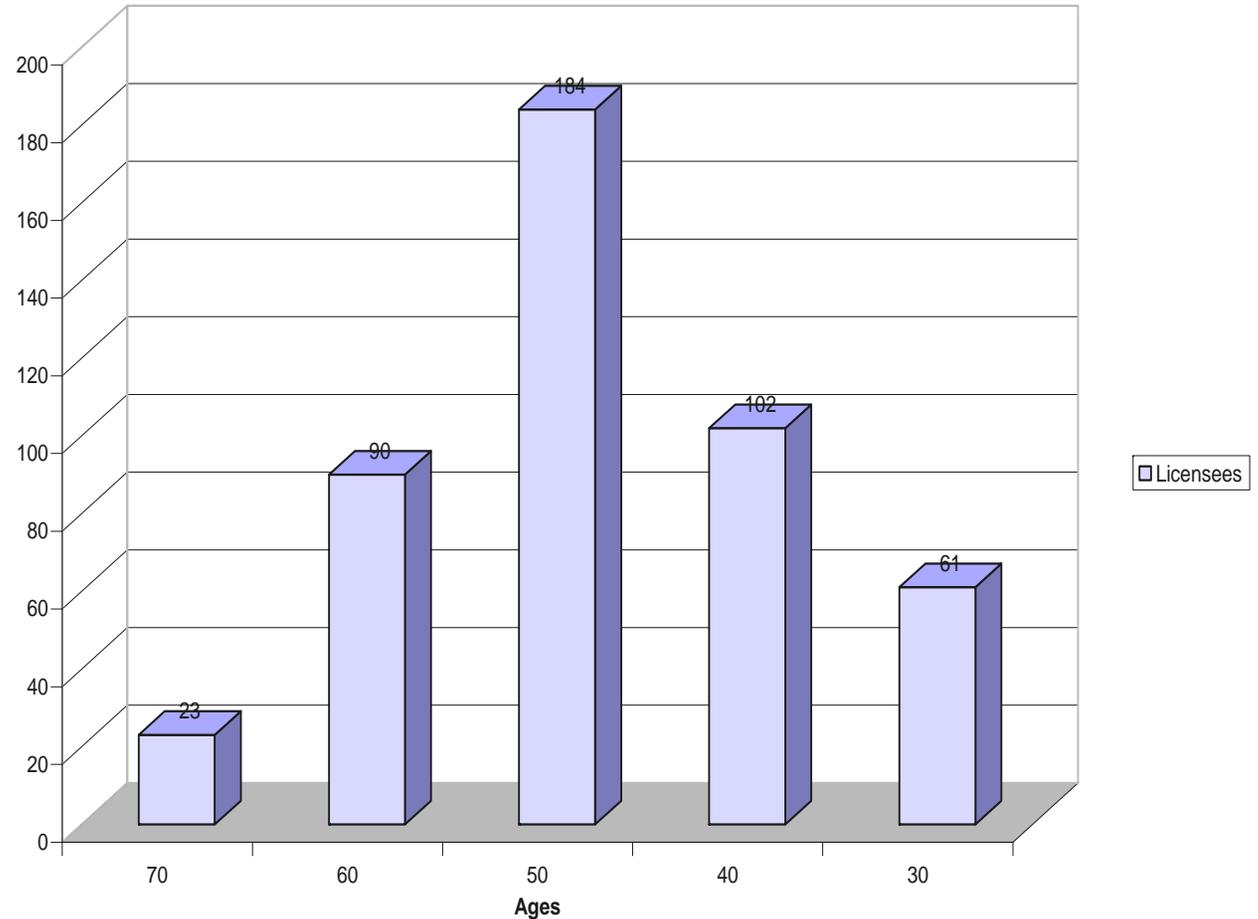
Number of Active Licenses:

Total ¹2005 = 461

In-state licensees = 406

Out-of-state licensees = 55

Total ²2001 = 521



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available

Psychologists – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76	4		1957	48	15
1930	75	2		1958	47	4
1931	74	2		1959	46	7
1932	73	4		1960	45	13
1933	72	4		1961	44	14
1934	71	3		1962	43	11
1935	70	4		1963	42	10
1936	69	5		1964	41	7
1937	68	6		1965	40	13
1938	67	9		1966	39	14
1939	66	4		1967	38	10
1940	65	7		1968	37	7
1941	64	15		1969	36	5
1942	63	7		1970	35	9
1943	62	5		1971	34	5
1944	61	16		1972	33	5
1945	60	16		1973	32	2
1946	59	18		1974	31	1
1947	58	20		1975	30	2
1948	57	19		1976	29	
1949	56	17		1977	28	1
1950	55	28				
	<i>Sub total</i>	215	(47%)			
1951	54	21				
1952	53	20				
1953	52	12				
1954	51	17				
1955	50	12			<i>Sub total</i>	245
1956	49	8			Grand Total	460

Source: BPL 12/21/04

Appendix U

REGISTERED NURSE SUPPLEMENTAL INFORMATION

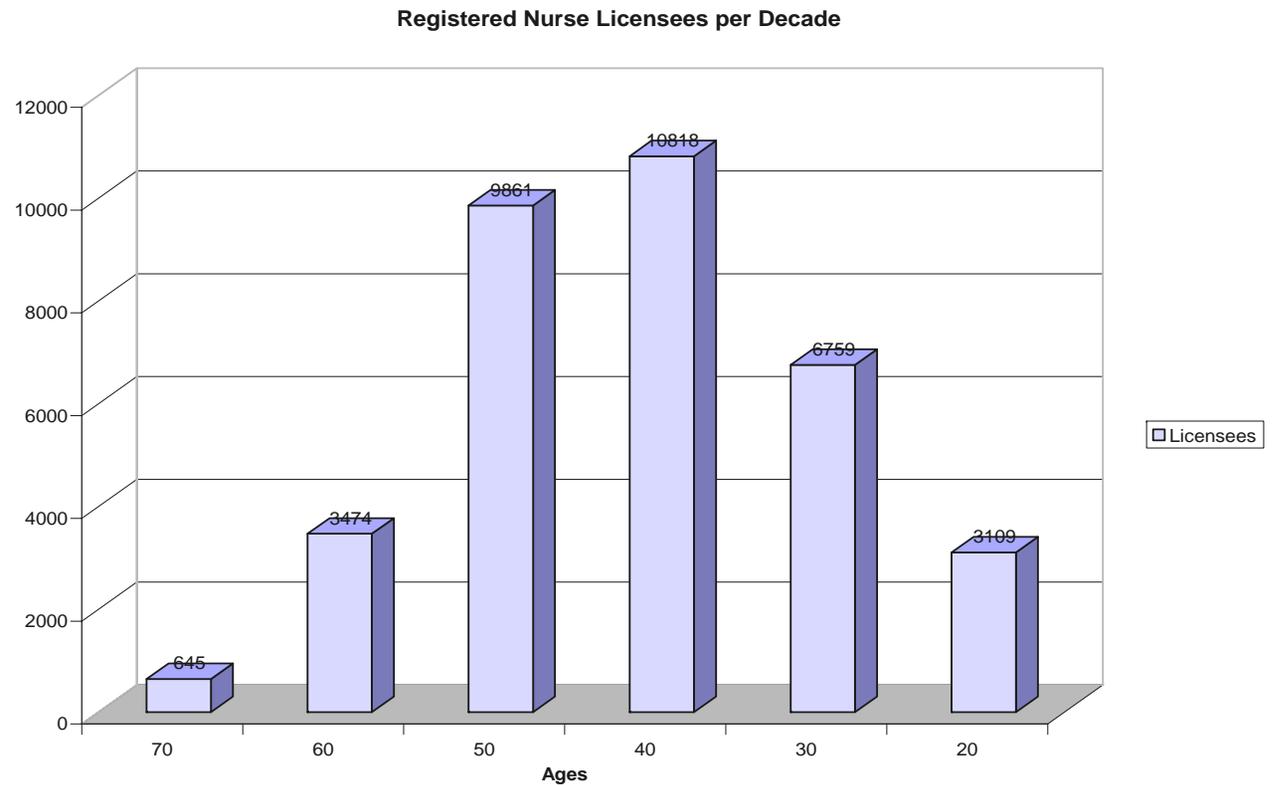
Year of First Licensure Requirement: 1907

Educational Requirements:
Graduate from an approved school of nursing at the RN level.

Total of all Licenses:
Not available (NA)

Number of Active Licenses:
Total ¹2005 = 34,666
In-state licensees = NA
Out-of-state licensees = NA

Total ²2001 = 38,839



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Registered Nurses – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Total
	≥ 76	120		1958	47	1122
1930	75	49		1959	46	1158
1931	74	60		1960	45	1079
1932	73	77		1961	44	1130
1933	72	87		1962	43	1085
1934	71	119		1963	42	994
1935	70	133		1964	41	938
1936	69	154		1965	40	777
1937	68	196		1966	39	734
1938	67	272		1967	38	646
1939	66	285		1968	37	630
1940	65	318		1969	36	712
1941	64	352		1970	35	766
1942	63	444		1971	34	762
1943	62	478		1972	33	678
1944	61	470		1973	32	641
1945	60	505		1974	31	610
1946	59	633		1975	30	580
1947	58	796		1976	29	534
1948	57	792		1977	28	535
1949	56	804		1978	27	463
1950	55	896		1979	26	463
	<i>Sub total</i>	8,040	<i>(23%)</i>	1980	25	431
1951	54	1088		1981	24	341
1952	53	1134		1982	23	236
1953	52	1199		1983	22	93
1954	51	1260		1984	21	13
1955	50	1259				
1956	49	1260			<i>Sub total</i>	26,616
1957	48	1275			Grand total	34,666

Source: Bd of Nursing 12/21/04

Appendix V

RESPIRATORY CARE THERAPIST SUPPLEMENTAL INFORMATION

Year of First Licensure

Requirement:

First licensed: 1989;
Mandatory licensure: 1996

Educational Requirements:

Complete a respiratory care education program from an accredited school/program for training respiratory therapists.

Total of all Licensees:

¹2,024

Number of Active Licenses

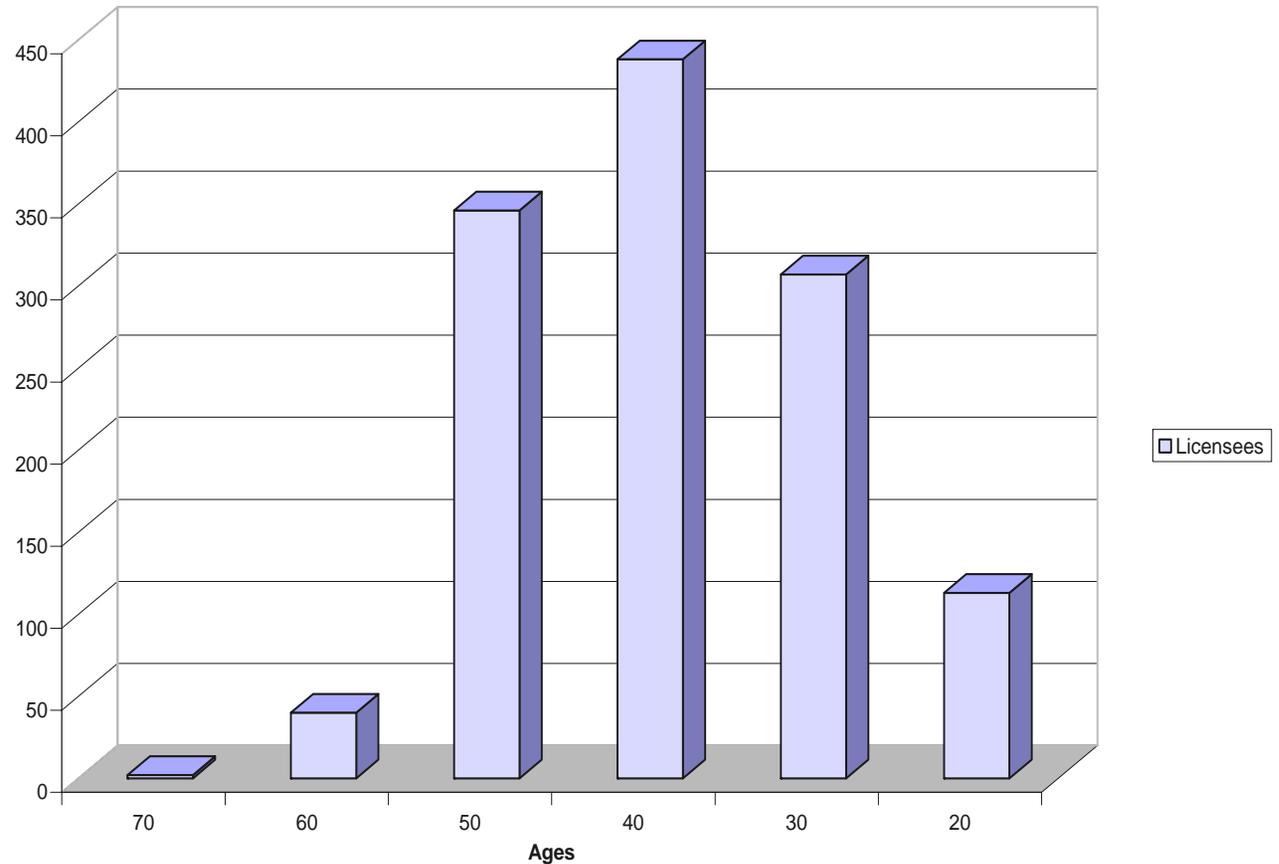
Total ¹2005 = 1,265

In-state licensees = 1,038

Out-of-state licensees = 227

Total ²2001 = 1,479

Respiratory Therapy Licensees per Decade



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Respiratory Care Practitioners – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76			1958	47	36
1930	75			1959	46	48
1931	74			1960	45	32
1932	73			1961	44	51
1933	72	1		1962	43	55
1934	71	1		1963	42	43
1935	70			1964	41	42
1936	69			1965	40	32
1937	68			1966	39	27
1938	67			1967	38	31
1939	66	2		1968	37	35
1940	65	3		1969	36	37
1941	64	5		1970	35	33
1942	63	5		1971	34	35
1943	62	4		1972	33	34
1944	61	12		1973	32	17
1945	60	9		1974	31	27
1946	59	11		1975	30	31
1947	58	20		1976	29	27
1948	57	26		1977	28	21
1949	56	28		1978	27	13
1950	55	39		1979	26	14
	<i>Sub total</i>	166	<i>(13%)</i>	1980	25	18
1951	54	36		1981	24	9
1952	53	42		1982	23	8
1953	52	50		1983	22	2
1954	51	50		1984	21	1
1955	50	44				
1956	49	39			<i>Sub total</i>	1,080
1957	48	60			Grand Total	1,246

Source: BPL 12/21/04

Appendix W

SOCIAL WORKER SUPPLEMENTAL INFORMATION

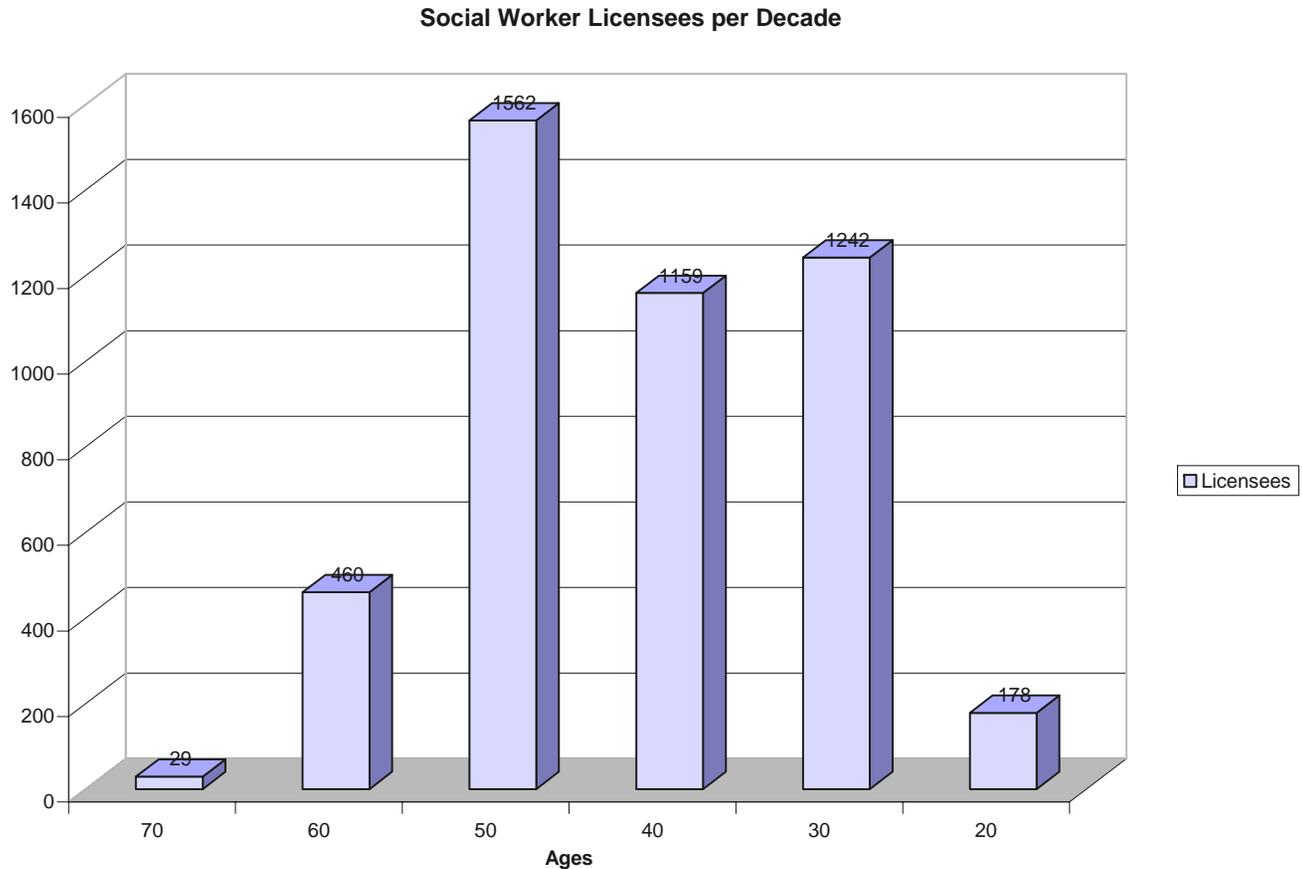
Year of First Licensure Requirement: 1996

Educational Requirements: Must have the appropriate level of education and experience according to the level at which they choose to practice. Baccalaureate degree is the minimum level of education.

Total of all Licensees:
¹6,393

Number of Active Licenses
Total ¹2005 = 3,914
In-state licensees = 3,656
Out-of-state licensees = 258

Total ²2001 = 5,305



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Social Workers – Ages in 2005

Year of Birth	Age in 2005	BSWs	ISWs	MSWs	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	BSWs	SWs	MSWs	Totals
	> 76			1	1		1958	47	61	39	27	127
1930	75						1959	46	49	36	27	112
1931	74						1960	45	54	40	29	123
1932	73			1	1		1961	44	58	37	18	113
1933	72		6	2	8		1962	43	63	23	18	104
1934	71	1	3	3	7		1963	42	50	27	16	93
1935	70	6	4	2	12		1964	41	55	22	17	94
1936	69	1	7		8		1965	40	59	30	19	108
1937	68	3	11	6	20		1966	39	63	27	28	118
1938	67	7	16	2	25		1967	38	63	20	19	102
1939	66	6	20	5	31		1968	37	61	22	31	114
1940	65	5	26	12	43		1969	36	63	24	18	105
1941	64	9	16	13	38		1970	35	64	20	22	106
1942	63	24	19	9	52		1971	34	66	20	29	115
1943	62	10	28	17	55		1972	33	50	14	30	94
1944	61	24	38	21	83		1973	32	48	8	23	79
1945	60	37	51	17	105		1974	31	28	11	19	58
1946	59	35	57	26	118		1975	30	20	7	24	51
1947	58	56	60	28	144		1976	29	15	5	23	43
1948	57	56	49	28	133		1977	28	12	3	27	42
1949	56	54	68	27	149		1978	27	14		25	39
1950	55	58	67	34	159		1979	26	12		21	33
	<i>Sub total</i>	392	546	254	1,192	<i>(28%)</i>	1980	25	5		11	16
1951	54	65	80	36	181		1981	24			5	5
1952	53	67	88	29	184							
1953	52	80	78	38	196							
1954	51	58	67	35	160							
1955	50	64	54	21	139							
1956	49	65	56	32	153			<i>Sub total</i>	1,511	893	735	3,139
1957	48	79	35	18	132			Grand Total	1,903	1,439	989	4,331

Source: BPL 12/21/04

Appendix X

SPEECH PATHOLOGIST SUPPLEMENTAL INFORMATION

Speech Pathologist Licensees per Decade

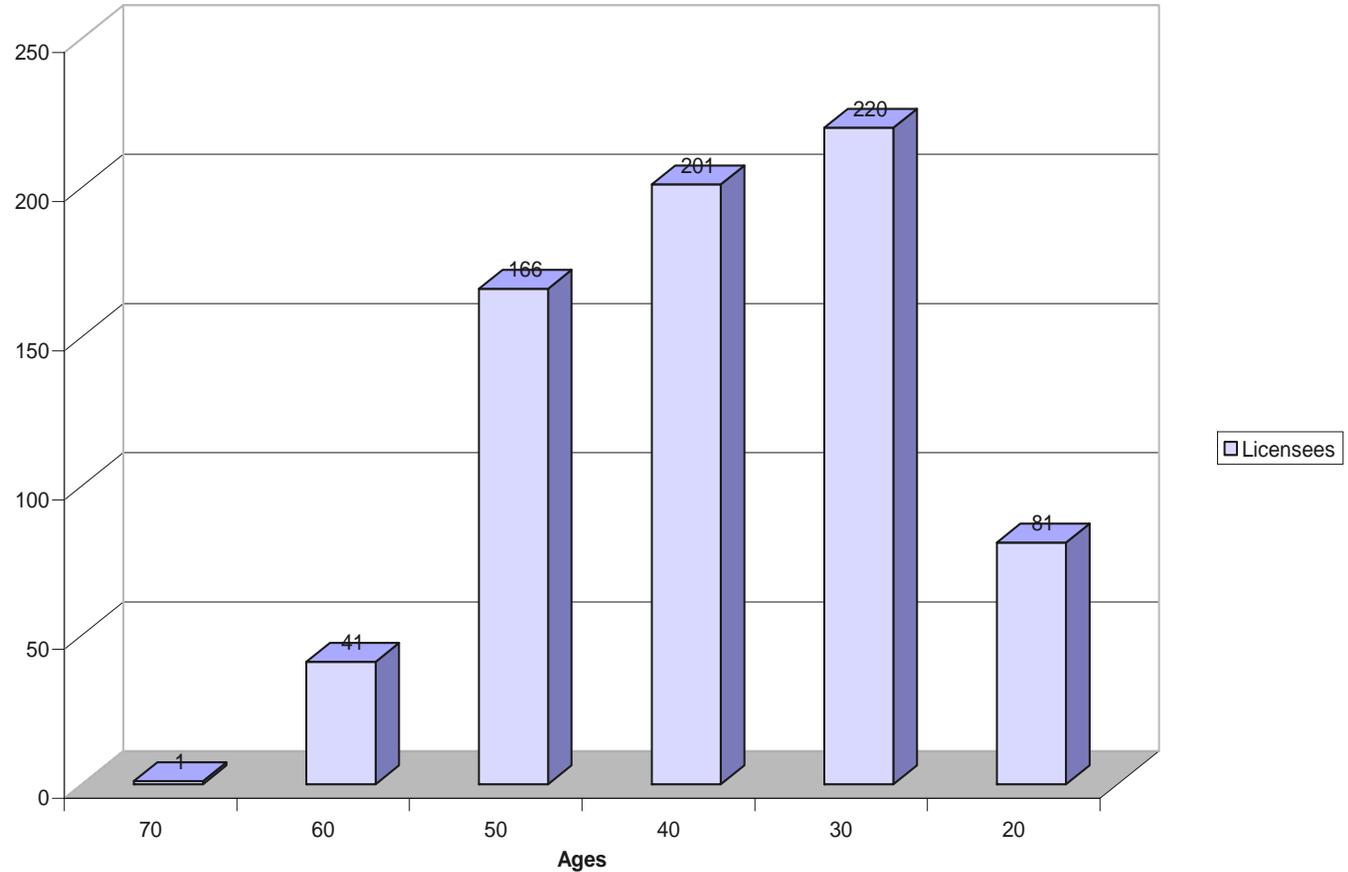
Year of First Licensure Requirement: 1977

Educational Requirements: Graduate with a master's degree or its equivalent from an accredited college with a major in speech pathology. There are additional requirements for supervised clinical training.

Total of all Licensees:
¹1,615

Number of Active Licensees:
Total ¹2005 = 732
In-state licensees = 610
Out-of-state licensees = 122

Total ²2001 = 724



¹Data provided by the Bureau of Professional Licensure on 1/11/05

²Data provided by Iowa Workforce Development in *Iowa Licensed Occupations 2003*. Comparable data for in-state and out-of state licensees were not available.

Speech Pathologists – Ages in 2005

Year of Birth	Age in 2005	Totals	Percentage Age 55 & Over	Year of Birth	Age in 2005	Totals
	≥ 76			1957	48	18
1930	75	1		1958	47	12
1931	74			1959	46	19
1932	73			1960	45	21
1933	72			1961	44	24
1934	71			1962	43	25
1935	70			1963	42	22
1936	69	1		1964	41	17
1937	68	3		1965	40	23
1938	67	3		1966	39	20
1939	66	2		1967	38	13
1940	65	4		1968	37	21
1941	64	4		1969	36	24
1942	63	5		1970	35	22
1943	62	7		1971	34	33
1944	61	6		1972	33	28
1945	60	6		1973	32	20
1946	59	7		1974	31	20
1947	58	14		1975	30	19
1948	57	15		1976	29	20
1949	56	17		1977	28	24
1950	55	15		1978	27	20
	<i>Sub total</i>	109	<i>(15%)</i>	1979	26	12
1951	54	17		1980	25	5
1952	53	19				
1953	52	21				
1954	51	21				
1955	50	20			<i>Sub total</i>	600
1956	49	20			Grand Total	709

Source: BPL 12/8/04