

SOUTH DAKOTA BOARD OF REGENTS

Full Board

**REVISED
AGENDA ITEM: AA**

DATE: April 2-3, 2009

SUBJECT: Healthcare Workforce Draft Plan

The Board of Regents convened a healthcare workforce roundtable in November 2008. Participants included representatives of State agencies and licensing boards, professional associations, employers and employer organizations, presidents, regents, and staff. There was consensus that program expansion efforts should focus on certain occupations. Department of Labor (DOL) projections, annual licenses issued, and university graduates were to be examined to determine which programs should be considered for expansion.

The DRAFT plan (Attachment I) identifies the targeted occupations, provides the Department of Labor projections, licenses issued in recent years, and graduates of public university programs. The Attachment also includes background information on state initiatives related to the healthcare workforce and the public university degree programs that prepare students for the targeted occupations. More information may be available at the meeting.

RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

For information only.

**South Dakota Board of Regents
 Healthcare Workforce Plan**

Healthcare Workforce Goals

The public universities prepare students for a variety of healthcare careers. The State will need to attract people to these careers in order to meet patient needs in the future. The Board’s goal is to ensure that the public university degree programs have the capacity to meet the State’s needs.

Healthcare Occupations Targeted for Further Analysis

A Department of Health (DOH) report *Building South Dakota's Healthcare Workforce: An Examination of Need* (July 2008, available at <http://doh.sd.gov/RuralHealth>) recognized needs for certain healthcare occupations. The Department grouped occupations in “highest need,” “high need” and “need” categories.

The Board of Regents convened a healthcare workforce roundtable in November 2008. Participants included representatives of State agencies and licensing boards, professional associations, employers and employer organizations, presidents, regents, and staff. The participants recognized that healthcare workforce issues are complicated and that different strategies will be needed:

- Attracting young people to careers in healthcare
- Attracting older people considering changing careers
- Offering degree programs with the capacity to meet State needs
- Recruitment of graduates and their spouses to employers and communities
- Retention of employees

Participants recognized that State resources for program expansion would be limited. There was consensus that program expansion efforts should focus on certain occupations. Department of Labor (DOL) projections, annual licenses issued, and university graduates were to be examined to determine which programs should be considered for expansion. The targeted occupations are provided in the table.

Healthcare Occupations Targeted for Further Analysis

Healthcare Occupation	Department of Health	University
Medical laboratory technologist	Highest need	NSU, SDSU, USD
Physician assistant	Highest need	USD
Physician	Highest need	USD
Physical therapist	High need	USD
Registered nurse (includes nurse practitioner)	High need	SDSU, USD
Respiratory therapist	High need	DSU
Pharmacist	Need	SDSU

Planning for a possible budget request to expand public university healthcare programs will focus on these occupations unless new information is provided by State agencies or employers.

Current State Initiatives Related to Healthcare Workforce

There are several State initiatives that are designed to help increase the number of healthcare workers.

Workforce 2025 Initiative (<http://www.workforce2025.com>)

- The goal of the Governor's Workforce 2025 initiative is to ensure that South Dakota has a competent and qualified workforce to allow for economic growth and expansion.
- Build Dakota: Healthcare Workforce Initiative <http://www.sdjobs.org/sdhott/summit.htm>

Governor's 2010 Education Initiative (<http://www.2010education.com>)

- Increase the number of graduates from Board of Regents' associate degree programs by 10 percent [USD AS in Nursing; DSU AS in Respiratory Care]
- Increase the number of graduates from bachelor degree programs by 20 percent [SDSU BS in Nursing; NSU & USD BS in Medical Technology, SDSU BS in Clinical Laboratory Sciences]
- Double the number of persons ages 25 and older engaged in postsecondary education [persons over 25 may enroll in any program; off-campus programs in Nursing and Respiratory Care attract older students]
- Achieve the national average of people with graduate degrees, moving from 6.5 to 9.4 percent

Governor's 2010 Initiative (<http://www.2010initiative.com>)

- Brand and Develop South Dakota's Quality of Life as the Best in America by 2010 [convenient availability of healthcare contributes to quality of life]

Healthcare Recruitment Assistance Programs (<http://doh.sd.gov/RuralHealth/recruit.aspx>)

Existing State programs are designed to assist with recruitment of healthcare providers. Increasing the number of South Dakota healthcare graduates would assist employers and communities seeking healthcare providers.

- Physician Tuition Reimbursement Program
- Dentist Tuition Reimbursement Program
- Midlevel Tuition Reimbursement Program: physician assistant, nurse practitioner, or certified nurse midwife
- State Loan Repayment Program: primary care physician, primary care nurse practitioner, certified nurse midwife, primary care physician assistant, general practice dentist, registered clinical dental hygienist, clinical or counseling psychologist, psychiatric nurse specialist, certified social worker, mental health counselor, licensed professional counselor, or marriage and family therapist

Healthcare Workforce Plan - DRAFT
April 2009

- Health Professional Recruitment Incentive Program: dietitian or nutritionist, nurse (LPN or RN), occupational therapist, respiratory therapist, laboratory technologist, pharmacist, physical therapist, paramedic, medical technologist, radiologic technologist
- National Health Service Corps Loan Repayment/Scholarship Program
- South Dakota National Guard Medical Recruitment Incentive Programs: Doctors, dentists, nurses, physician assistants

Department of Labor Current and Projected Jobs, 2006-2016

The South Dakota Department of Labor's Labor Market Information Center (LMIC) estimates the numbers of South Dakota jobs in occupations and projects the numbers of jobs ten years into the future.¹

2006 Base Number of Jobs

This total employment estimate is primarily based on data from South Dakota's Covered Employment and Wages (QCEW) program and the Current Employment Statistics (CES) program.

Estimates for agricultural-related employment not covered in the above programs, self-employed workers, and private household workers were derived from 2000 Census and Bureau of Labor Statistics data. Estimates of presumed non-covered (PNC) employment collected via a survey were also utilized in creating historical staffing patterns for religious organizations, schools and other establishments.

Total South Dakota 2006 base year employment was 465,550 compared to 423,115 for Local Area Unemployment Statistics (LAUS) employment, 383,856 for QCEW employment, and 398,600 for CES employment in 2006.

2016 Projected Number of Jobs

This total employment estimate is produced using forecasting software that utilizes a variety of mathematical models, including regression analyses, to produce a projected employment estimate.

This process takes into account state relationships to national factors on such data elements as population and personal income statistics.

¹ Labor Market Information Center, Menu for Projections: <http://www.state.sd.us/dol/lmic/menuprojections.htm> . The definitions are from the "projections methodology" glossary (accessed March 25, 2009). Some details omitted.

Jobs Due to Growth

Jobs due to growth are created by industry employment expansion.

The annual average number of jobs expected to be available yearly due to growth is calculated by dividing the projected employment growth by the number of years in the projection period, in this case ten.

Growth is rarely the main cause of net job openings and creates the majority of jobs expected to be available yearly only in the fastest growing occupations. Negative growth (or declining employment) is shown as zero; negative growth demand will not affect the replacement need.

Jobs Due To Net Replacement

Jobs available due to replacement are job openings attributed to workers who permanently leave an occupation (e.g. retirement, death, exits the workforce, etc.).

Annual average jobs due to net replacement are calculated using national net replacement rates. These rates are provided by BLS and applied to South Dakota employment figures to estimate the number of job openings that are likely to be filled by young adults entering the workforce for the first time or older workers who are reentering the workforce. The resulting net replacement figures are included in all occupational projection reports. A detailed explanation of how these rates are developed can be found at <http://www.bls.gov/emp/optd/optd005.pdf>

Average Annual Demand

The demand for workers needed yearly is based on two factors: the number of jobs expected to be available due to growth and the number of jobs expected to be available due to replacement needs.

Total jobs are the summation of job openings due to growth and job openings due to replacement.

Annualized results are calculated by dividing by ten, the number of years in the projection period. NOTE: Average Annual Demand is an estimate that results from division. It is NOT the number of job vacancies in any specific year within the ten-year period.

Healthcare Workforce Plan - DRAFT
April 2009

Targeted Healthcare Occupations
 South Dakota Department of Labor Estimated and Projected Jobs, 2006 to 2016

Occupational Title	2006 Base Number of Jobs	2016 Projected Number of Jobs	Percent Change	2006-2016 Annual Averages		
				Jobs Due to Growth	Jobs Due to Replace- ment	Total Avg. Annual Demand
<i>Department of Health: Highest Need</i>						
Medical & Clinical Lab Technologists	790	920	16.5%	13	12	25
Physician Assistants	455	610	34.1%	16	7	23
Physicians						
Anesthesiologists	155	175	12.9%	2	3	5
Family and General Practitioners	425	480	12.9%	6	8	14
Internists, General	275	310	12.7%	4	5	9
Obstetricians and Gynecologists	190	215	13.2%	3	4	7
Pediatricians, General	175	185	5.7%	1	3	4
Psychiatrists	90	100	11.1%	1	2	3
Surgeons	345	400	15.9%	6	6	12
Physicians and Surgeons, All Other	<u>305</u>	<u>360</u>	18.0%	<u>6</u>	<u>6</u>	<u>12</u>
Physicians, total	1,960	2,225	13.5%	29	37	66
<i>Department of Health: High Need</i>						
Physical Therapists	530	695	31.1%	17	7	24
Registered Nurses	9,705	12,440	28.2%	274	160	434
Respiratory Therapists	270	350	29.6%	8	4	12
<i>Department of Health: Need</i>						
Pharmacists	1,050	1,310	24.8%	26	18	44

Source: DOL, LMIC web site: <http://www.state.sd.us/dol/lmic/menuprojections.htm>, Excel file for SD occupational projections for 2006-2016, accessed August 19, 2008; physician totals added.

Healthcare Workforce Plan - DRAFT
April 2009

New South Dakota Licenses Issued

Participants at the November roundtable encouraged examination of the licensing board data as additional information related to the supply of new healthcare professionals. State licensing boards were asked for new licenses issued in recent years. There is no state licensing board for medical laboratory technologists.² Detailed license information is provided in the Appendix.

The supply of new practitioners includes graduates of South Dakota degree programs and graduates of out-of-state programs. Graduates of out-of-state programs may include residents returning home after completing their education, people who have accepted positions in South Dakota, and trailing spouses.

The number of new licenses issued does not provide information about employment. Some people choose to work part-time. Others have not found positions. Some may be continuing their education. Others may work in teaching or research instead of patient care. Some licensed nurses and physicians reside in other states and provide healthcare telephonically. The number of new licenses is not the number of new full-time employees in South Dakota.

Board Medical and Osteopathic Examiners

The Board of Medical and Osteopathic Examiners (BMOE)³ licenses four of the targeted occupations. The Board provided new licenses issued in FY04 through FY08. For physicians only, the new licenses are broken out by medical school (USD/all others). Also for physicians, BMOE provided the number not renewed in each year and the net increase in licenses.

Board of Medical and Osteopathic Examiners
 New Licenses Issued, FY04-FY08 and Averages

New South Dakota Licenses*	5-Year	
	Total	Average
Physician - USD Medical School	133	26.6
Physician - Other Medical Schools	<u>1,039</u>	207.8
Physician, total	1,172	234.4
Not Renewed	(819)	(164)
Net Increase	353	70.6
Physician assistant	179	35.8
Physical therapist	198	39.6
Respiratory care practitioner	<u>244</u>	<u>48.8</u>

See Appendix for licenses by year.

² Medical technologists are certified by national organizations. The organizations will be asked for information about certified technologists in South Dakota.

³ Board of Medical and Osteopathic Examiners: <http://doh.sd.gov/boards/medicine>

Healthcare Workforce Plan - DRAFT
April 2009

Board of Nursing

The Board of Nursing (BON)⁴ provided new licenses issued to registered nurses and certified nurse practitioners.

Board of Nursing
 New Licenses Issued, Calendar Years 2004-2008 and Averages

New Registered Nurse Licenses Issued	5-Year	
	Total	Average
<i>Licenses by Examination (all new licenses, including re-writes)</i>		
Associate - USD	821	164.2
Associate - Other SD programs	241	48.2
Bachelor's - SDSU	686	137.2
Bachelor's - Other SD programs	332	66.4
Out of state + SD re-exams*	<u>229</u>	45.8
New RN Licenses by Examination	2,309	461.8
New RN Licenses by Endorsement	<u>1,507</u>	301.4
Total SD RN Licenses Issued	3,816	763.2
New Certified Nurse Practitioner Licenses		
Nurse practitioner - SDSU program	64	12.8
Nurse practitioner - Other programs	<u>82</u>	16.4
Initial NP licenses	146	29.2

See Appendix for licenses by year. BON data are for calendar years.

* Graduates of out-of-state programs and SD program graduates who re-tested.

Board of Pharmacy

The Board of Pharmacy (BOP)⁵ provided initial pharmacist registrations for fiscal years FY04 through FY08.

Board of Pharmacy
 New Licenses Issued, FY04-FY08 and Averages

Pharmacists	5-Year	
	Total	Average
Initial Registration - SDSU graduates	227	45.4
Initial Registration - other programs	<u>99</u>	19.8
Total Initial Registrations	326	65.2

See Appendix for licenses by year.

⁴ Board of Nursing: <http://doh.sd.gov/boards/nursing>

⁵ Board of Pharmacy: <http://doh.sd.gov/boards/pharmacy>

Healthcare Workforce Plan - DRAFT
April 2009

Public University Graduates

Public university graduates from the selected healthcare programs are provided in the Appendix. The average graduates are provided in the next table.

Targeted Healthcare Occupations
 Public University Program Graduates, FY04-FY08 Total & Average

Healthcare Program	University	5-Year Total	Average
<i>DOH: Highest Need</i>			
Medical laboratory technologists	N/S/U	67	13.4
Physician assistant	USD	94	18.8
Physician	USD	53	49.8
<i>DOH: High Need</i>			
Physical therapist	USD	90	18.0
Registered nurse, Associate degree	USD	1,186	237.2
Registered nurse, Bachelor's degree	SDSU	977	195.4
Registered nurse, nurse practitioner	SDSU	98	19.6
Respiratory therapists/care practitioner	DSU	76	15.2
<i>DOH: Need</i>			
Pharmacist	SDSU	291	58

See Appendix for graduates by year and location (nursing). SDSU BS Nursing includes only degrees to new RNs (generic); degrees awarded to persons who became RNs with a diploma or an associate degree are not included.

Nurse practitioner: In December 2008, the Board of Regents approved a new SDSU Doctor of Nursing Practice program and terminated the nurse practitioner component of the M.S. in Nursing. The graduates shown are nurse practitioner graduates from the MS program.

Summary of DOL Average Demand, Licenses & Public University Graduates

The next table provides the average annual demand (DOL), the average public university graduates (BOR), and the average licenses (boards).

Healthcare Occupation	DOL Average Annual Demand	Avg. Univ. Grads 5-years	Avg. Grads Minus Demand	Avg. New SD Licenses 5-years	Avg. Licenses Minus Demand
<i>Department of Health: Highest Need</i>					
Medical laboratory technologists*	25	13.4	(12)	NA	
Physician assistant	23	18.8	(4)	35.8	13
Physician	66	49.8	(16)	234.4	168
				(163.8)	
				70.6	5
<i>Department of Health: High Need</i>					
Physical therapist	24	18.0	(6)	39.6	16
Registered nurse	434	432.6	(1)	763.2	329
Registered nurse/nurse practitioner*				29.2	
Respiratory therapist/care practitioner	12	15.2	3	48.8	37
<i>Department of Health: Need</i>					
Pharmacy	44	58.2	14	65.2	21

* There is no SD licensing board for medical laboratory technologists. DOH includes nurse practitioners within registered nurses as a "high need" occupation. DOL does not provide an average annual demand for nurse practitioners.

Medical Laboratory Technologist

The average annual demand projected by the Department of Labor (25) exceeds the average system graduates (13).

Physician Assistant

The average new licenses issued (36) exceeds the average annual demand projected by the Department of Labor (23). The average number of graduates (19) is below the projected annual demand.

Physician

The average new licenses issued (234) exceeds the average annual demand projected by the Department of Labor (66). When adjusted for physicians who do not renew their license, the net increase (71) is close the DOL projected demand (66). The average number of graduates (50) is below the projected annual demand.

Healthcare Workforce Plan - DRAFT
April 2009

Physical Therapist

The average new licenses issued (40) exceeds the average annual demand projected by the Department of Labor (24). The average number of graduates (18) is below the average annual demand.

Registered Nurse

The average new licenses issued (763) exceeds the average annual demand projected by the Department of Labor (434). The average number of public university graduates (433) is about the same as the projected annual demand.

Other South Dakota colleges and universities also offer registered nursing programs. Colleges and universities with nursing programs report their graduates to the Board of Nursing. The Board of Nursing provided the numbers of graduates for recent federal fiscal years.

RN Programs Graduates	<i>BON graduates data are for federal fiscal years.</i>					5-Year Total	5-Year Average
	FFY04	FFY05	FFY06	FFY07	FFY08		
Associate - USD	189	213	260	272	246	1,180	236.0
Associate - Other SD	48	46	69	75	81	319	63.8
Bachelor's - SDSU	160	186	204	217	223	990	198.0
Bachelor's - Other SD	<u>108</u>	<u>88</u>	<u>115</u>	<u>139</u>	<u>159</u>	<u>609</u>	121.8
Total SD New RN Graduates	505	533	648	703	709	3,098	619.6

Board of Nursing: Federal fiscal years are October 1 to September 30. Totals and averages computed. Graduates reported by colleges and universities include out-of-state residents who may return home to work.

Registered Nurse/Nurse Practitioner

The Department of Labor includes nurse practitioners within the registered nurse estimates and projected average annual demand. The average new licenses issued (29) is above the average system graduates (20).

Respiratory Therapist/Respiratory Care Practitioner

The average new licenses issued (49) exceeds the average annual demand projected by the Department of Labor (12). The average number of public university graduates (15) is above the projected annual demand.

Pharmacist

The average new licenses issued (65) exceeds the average annual demand projected by the Department of Labor (44). The average number of public university graduates (58) is above the average annual demand.

Healthcare Workforce Plan - DRAFT
April 2009

Public University Healthcare Programs: Enrollments, Class Sizes & Time to Degree

Public university program enrollments are provided in the next table. The total enrollments include entering (first year) students and continuing students.

Targeted Healthcare Occupations Public University Programs, Total Enrollments, fall 2007 & 2008		
Healthcare Program (University & Degree)	Enrollment Fall 2007	Enrollment Fall 2008
<i>Department of Health: Highest Need</i>		
Medical Laboratory Technologist		
• Medical Technology (NSU BS)	14	9
• Clinical & laboratory sciences (SDSU BS)	52	47
• Medical Technology (USD BS)	41	34
Physician assistant (USD MS)	59	61
Physician (USD MD)	208	207
<i>Department of Health: High Need</i>		
Physical therapist (USD DPT)	75	78
Registered Nurse		
• Nursing (USD AS), all locations	531	544
• Nursing (SDSU BS), all locations	556	554
• Nurse Practitioner (SDSU DNP, campus)	New in 2009	New in 2009
Respiratory Therapist (DSU AS)	56	57
<i>Department of Health: Need</i>		
Pharmacist (SDSU PharmD)	261	269
• USD Physician: Enrollments include the Physician Scientist MD-PhD program (6 in 2007; 9 in 2008). New State funds were provided for the MD-PhD program in FY06.		
• USD AS Nursing: Includes students enrolled on campus, in Sioux Falls, Watertown, Pierre, and Rapid City and by distance. Additional students identified themselves as “pre-nursing” (506 in 2007; 573 in 2008).		
• SDSU BS Nursing: The degree is offered in three locations: <ul style="list-style-type: none"> ○ 2007 total, 556: Campus – 363, Rapid City – 145, Sioux Falls (Accelerated) – 48 ○ 2008 total, NA: Campus – 363, Rapid City – 151, Sioux Falls (Accelerated) – 40 New State funds were provided for the Accelerated BSN program in FY03 and FY04 (temporary) and FY05 (continuing). Funds were provided for 32 students; SDSU has used external grants to support additional students. Additional SDSU students identified themselves as “pre-nursing” (555 in 2007; 591 in 2008).		
• SDSU Nurse Practitioner: The program will begin in fall 2009. The budget includes resources for 8 full-time (FT) students and 12 part-time (PT) students.		
• DSU Respiratory Care: AS students only; the AS degree is a prerequisite for the BS degree.		
• SDSU PharmD includes juniors, seniors, and 5 th and 6 th year students. Additional students identified themselves as “pre-pharmacy” (348 in 2007; 332 in 2008).		

Healthcare Workforce Plan - DRAFT
April 2009

Program expansion would be accomplished by increasing class sizes. Full implementation and the increase in the number of graduates depends on the number of years it takes students to complete the program.

For example, the three-year USD physician assistant program currently admits 20 students each year. With 100% retention, full enrollment is 60 students (20 students/class x 3 classes). If there were an expansion of 10% (2 students per class), the expansion would be fully implemented by the third year with 66 students (22 students/class x 3 classes). The first increase in graduates would occur at the end of the third year when the first expanded class completed the program (22 graduates instead of 20). Classes and time to degree are provided in a table below.

The next table provides the entering class sizes and program lengths in years.

Targeted Healthcare Occupations
 Public University Programs Current Entering Class Sizes and Program Length

Program	Current Entering Class	Program Length in Years
<i>Department of Health: Highest Need</i>		
Medical Lab Techs (NSU BS)	2	4
Medical Lab Techs (SDSU BS)	24	2
Medical Lab Techs (USD BS)	18	4
Physician Assistant (USD MS)	20	3
Physician (USD MD)	50	4
<i>Department of Health: High Need</i>		
Physical Therapist (USD DPT)	26	3
Registered Nurse (USD AS)	262	2
Registered Nurse (SDSU BS) Accelerated	48	1
Registered Nurse (SDSU BS) Rapid City	32	2.5
Registered Nurse (SDSU BS) Campus	160	2.5
Nurse Practitioner (SDSU DNP) Campus	FT: 8 PT: 12	FT: 3 PT: 5
Respiratory Care (DSU AS/BS)	26	2/4
<i>Department of Health: Need</i>		
Pharmacist (SDSU PharmD)	70	4

- Medical Laboratory Technologists: The SDSU “clinical and laboratory sciences” major requires 2 years after admission as a junior. The NSU and USD programs are titled “medical technology.” NSU and USD: New fall 2007 students.
- Registered Nurse, SDSU BS: The Accelerated program takes one year because students enter with general education and required prerequisite courses completed. On the campus and in Rapid City, students complete three semesters of general education and science before admission; the nursing component is five semesters (2.5 years).
- Nurse Practitioner, SDSU DNP: The program was approved in December 2008 for implementation in fall 2009. The budget includes resources for eight full-time students (3 years to completion) and 12 part-time students (5 years to completion).
- Respiratory Care, DSU: Unduplicated number of new associate and bachelor’s degree freshmen and transfers in fall 2007 who declared the major; admissions requirements are applied before clinicals. The A.S. degree or equivalent is a prerequisite for the B.S. program.
- Pharmacy: Students complete two years of general education and prerequisites before admission to the PharmD program as juniors.

Appendix

- Summary: Average Annual Demand, Average Graduates and Average New Licenses
- Public University Graduates, FY04-FY08
- New Licenses: Board of Medical and Osteopathic Examiners, Board of Nursing, Board of Pharmacy

South Dakota Board of Regents
Targeted Healthcare Occupations

Summary: DOL Average Annual Demand, Public University Average Graduates FY04-FY08, and Average New SD Licenses
Revised April 1, 2009

Healthcare Occupation	SD Department of Labor, Labor Market Information Center				Average Univ. Grads 5-years	Average Grads Minus Demand	Average New SD Licenses 5-years	Average Licenses Minus Demand	
	Estimated 2006 Jobs	Projected 2016 Jobs	Percent Change	Due to Growth					Due to Replace
<i>Department of Health: Highest Need</i>									
Medical laboratory technologists	790	920	16.5%	13	12	25	13.4	(12)	No SD licensing
Physician assistant	455	610	34.1%	16	7	23	18.8	(4)	35.8
Physician	1,960	2,225	13.5%	29	37	66	49.8	(16)	234.4
							Not Renewed		(163.8)
							Net Increase		70.6
<i>Department of Health: High Need</i>									
Physical therapist	530	695	0.311	17	7	24	18.0	(6)	39.6
<i>Department of Health: High Need</i>									
Registered nurse, bachelor (generic only)							195.4		
Registered nurse, associate							237.2		
Registered nurse	9,705	12,440	28.2%	274	160	434	432.6	(1)	763.2
Registered nurse - nurse practitioner							19.6		29.2
Respiratory Therapist/care practitioner	270	350	29.6%	8	4	12	15.2	3	48.8
<i>Department of Health: Need</i>									
Pharmacy	1,050	1,310	24.8%	26	18	44	58.2	14	65.2

Sources: Department of Labor: Labor Market Information Center web site, <http://www.state.sd.us/dol/lmic/menuprojections.htm>

Department of Health: *Building South Dakota's Healthcare Workforce: An Examination of Need*, July 2008, available at <http://doh.sd.gov/RuralHealthLicenses>: Board Medical & Osteopathic Examiners, Board of Nursing, Board of Pharmacy (see following pages for details)
Graduates, SD Board of Regents (see following pages for details): Public university graduates only.

Healthcare Workforce DRAFT
April 2009

Appendix

South Dakota Board of Regents
Degrees Conferred by Public Universities, FY04 - FY08, Targeted Healthcare Occupations

CIP	Major Description	Univ	Degree	FY04	FY05	FY06	FY07	FY08	5-Year	Total	Average
<i>Department of Health: Highest Need</i>											
Medical Laboratory Technologists											
5111005	Clinical & Laboratory Sciences	S	B	0	1	8	14	13	36	7.2	
5111005	Clinical Laboratory Tech	S	B	3	2	0	0	0	5	1.0	
5111005	Medical Technology	N	B	1	1	1	1	1	5	1.0	
5111005	Medical Technology	U	B	<u>4</u>	<u>6</u>	<u>4</u>	<u>5</u>	<u>2</u>	<u>21</u>	4.2	
	System Total		B	8	10	13	20	16	67	13.4	
510912	Physician Assistant Studies (new)	U	M	0	0	6	21	19	46	9.2	
510912	Physician Assistant Studies (old)	U	B	<u>19</u>	<u>16</u>	<u>12</u>	<u>1</u>	<u>0</u>	<u>48</u>	9.6	
	Total	U		19	16	18	22	19	94	18.8	
511201	Medicine	U	MD	49	48	51	48	53	249	49.8	

Source: Degrees conferred reported by the universities.
Report generated by Regents Information Systems.
Report data were extracted at 8:30 AM on 07/07/2008.

Degrees: A = associate
B = bachelor's
M = master's

South Dakota Board of Regents
Degrees Conferred by Public Universities, FY04 - FY08, Targeted Healthcare Occupations

CIP	Major Description	Univ	Degree	FY04	FY05	FY06	FY07	FY08	5-Year	Average
				2003-04	2004-05	2005-06	2006-07	2007-08	Total	
<i>Department of Health: High Need</i>										
512308	Physical Therapy (new degree)	U	DPT	0	0	0	6	21	27	5.4
512308	Physical Therapy (old degree)	U	M	16	17	15	15	0	63	12.6
	Total	U		16	17	15	21	21	90	18.0
511601	AS Nursing, Campus	U	A	45	35	38	44	41	203	40.6
511601	AS Nursing, Rapid City	U	A	44	63	74	81	80	342	68.4
511601	AS Nursing, Sioux Falls	U	A	45	62	80	72	72	331	66.2
511601	AS Nursing, Watertown	U	A	36	35	37	38	23	169	33.8
511601	AS Nursing, Pierre	U	A	15	10	14	18	14	71	14.2
511601	AS Nursing, Distance	U	A	5	6	16	25	18	70	14.0
	Total	U	A	190	211	259	278	248	1,186	237.2
511601	BS Nursing, Campus	S	B	99	113	125	121	136	594	118.8
511601	BS Nursing, Rapid City	S	B	26	43	45	45	43	202	40.4
511601	BS Nursing, Accelerated	S	B	30	37	34	31	49	181	36.0
	Total	S	B	155	193	204	197	228	977	195.4
511601	MS Nursing, Family Nurse Prac	S	M	11	17	22	16	20	86	17.2
511601	MS Nursing, Neonatal Nurse Prac	S	M	2	1	1	2	0	6	1.2
511601	MS Nursing, Psychiatric Nurse Prac	S	M	0	2	2	1	1	6	1.2
	Total nurse practitioner*			13	20	25	19	21	98	19.6
510908	Respiratory Care	D	B	1	0	4	3	3	11	2.2
510908	Respiratory Care	D	A	14	13	12	19	18	76	15.2
512001	Pharmacy	S	PHRMD	59	57	59	54	62	291	58.2

Department of Health: Need

* The Board approved a new Doctor of Nursing Practice program in December 2008 and terminated the master's degree nurse practitioner program. The Doctor of Nursing Practice program will begin in fall 2009.

Healthcare Workforce DRAFT
April 2009

South Dakota Board of Regents
South Dakota Licensing Boards: New Licenses Issued in Recent Years
Revised April 1, 2009

South Dakota Board of Medical and Osteopathic Examiners

	FY04 2003-04	FY05 2004-05	FY06 2005-06	FY07 2006-07	FY08 2007-08	5-Year Total	Average
New South Dakota Licenses*							
Physician - USD Medical School	31	29	30	21	22	133	26.6
Physician - Other Medical Schools	<u>228</u>	<u>197</u>	<u>176</u>	<u>218</u>	<u>220</u>	<u>1,039</u>	<u>207.8</u>
Physician, total	259	226	206	239	242	1,172	234.4
Not Renewed	(99)	(145)	(199)	(220)	(156)	(819)	(163.8)
Net Increase	160	81	7	19	86	353	70.6
Physician assistant	50	24	36	37	32	179	35.8
Physical therapist	44	42	34	39	39	198	39.6
Respiratory care practitioner	50	53	52	34	55	244	48.8

Source: SD Board of Medical and Osteopathic Examiners, by electronic mail from James Slattery, March 20 & 25, 2009.

*These are new SD licenses only (not renewals). Five year total and average computed by BOR.

South Dakota Board of Pharmacy

	FY04 2003-04	FY05 2004-05	FY06 2005-06	FY07 2006-07	FY08 2007-08	5-Year Total	Average
Pharmacists							
Initial Registration - SDSU graduates	44	42	41	49	51	227	45.4
Initial Registration - other programs	<u>17</u>	<u>15</u>	<u>20</u>	<u>26</u>	<u>21</u>	<u>99</u>	<u>19.8</u>
Total Initial Registrations	61	57	61	75	72	326	65.2

Source: FY04-FY08 registrations from South Dakota Board of Pharmacy, electronic mail from Ronald Heather, March 11, 2009.

Five year total and average computed by BOR.

South Dakota Licensing Boards: New Licenses Issued in Recent Years

South Dakota Board of Nursing

New SD RN Licenses Issued Degree & College/University	BON license data are for calendar years					5-Year	
	2004	2005	2006	2007	2008	Total	Average
<i>Licenses by Examination (all new licenses, including re-writes)</i>							
Associate - USD	133	157	180	161	190	821	164.2
Associate - Other SD programs	41	30	48	59	63	241	48.2
Associate - Not SD	NA	NA	NA	NA	NA		
Bachelor's - SDSU	115	124	133	151	163	686	137.2
Bachelor's - Other SD programs	70	41	61	61	99	332	66.4
Out of state + SD re-exams*	0	50	28	69	82	229	45.8
New RN Licenses by Examination	359	402	450	501	597	2,309	461.8
New RN Licenses by Endorsement	250	286	287	316	368	1,507	301.4
Total SD RN Licenses Issued	609	688	737	817	965	3,816	763.2

Certified Nurse Practitioner Licenses Issued	BON license data are for calendar years					5-Year	
	2004	2005	2006	2007	2008	Total	Average
Nurse practitioner - SDSU program	6	17	14	16	11	64	12.8
Nurse practitioner - Other programs	12	20	18	14	18	82	16.4
Initial NP licenses	18	37	32	30	29	146	29.2

Source: South Dakota Board of Nursing, electronic mail, March 23, telephone March 24, electronic mail March 25, 2009.
 2004-2008 Total SD RN Licenses issued by exam determined by SD BON licensure database reports

* This row includes graduates of out-of-state programs and graduates of SD programs who re-tested.

Healthcare Workforce DRAFT
April 2009

South Dakota Licensing Boards: New Licenses Issued in Recent Years

South Dakota Board of Nursing (continued)

Graduates of South Dakota RN Programs	BON graduates data are for federal fiscal years.					5-Year Total	Average
	FFY04	FFY05	FFY06	FFY07	FFY08		
Associate - USD	189	213	260	272	246	1,180	236.0
Associate - Other SD	48	46	69	75	81	319	63.8
Bachelor's - SDSU	160	186	204	217	223	990	198.0
Bachelor's - Other SD	108	88	115	139	159	609	121.8
Total SD New RN Graduates	505	533	648	703	709	3,098	619.6

Board of Nursing: Federal fiscal years are October 1 to September 30. Totals and averages computed.

2005-2008 Total SD RN graduates determined by SD BON Annual Report of Nursing Education Programs

Graduates are for federal fiscal years (FFY): 2007 is October 1, 2006 to September 30, 2007

Graduates include only new RN program graduates (NOT LPN or Upward Mobility).